

THE MEDICAL NEWS.

A WEEKLY JOURNAL OF MEDICAL SCIENCE.

VOL. XLVII.

SATURDAY, OCTOBER 17, 1885.

No. 16.

ORIGINAL ARTICLES.

RELATION OF HERPES GESTATIONIS AND CERTAIN OTHER FORMS OF DISEASE TO DERMATITIS HERPETIFORMIS.¹

BY LOUIS A. DUHRING, M.D.,

PROFESSOR OF SKIN DISEASES IN THE UNIVERSITY OF PENNSYLVANIA.

In my original communication on Dermatitis Herpetiformis, read before the American Medical Association,² that disease was described, and its symptoms and several varieties given. It was there stated that the pustular variety is the same manifestation as the affection described by Hebra as "impetigo herpetiformis." This latter subject has more recently been elaborated by me in a paper read before this Association³ at its last meeting.

On the same occasion I presented a "Preliminary Note on the Relation of Dermatitis Herpetiformis to Herpes Gestationis and Other Similar Forms of Disease,"⁴ which communication embodied the results of considerable research into literature bearing upon the subject. It was there stated, as had been intimated in my previous articles, that so-called herpes gestationis, as well as certain other similar forms of eruption, reported with various titles, are all instances of one process, namely, dermatitis herpetiformis, as I had defined this disease.

The remarks about to be made must be regarded as supplementary to the preliminary note referred to, since presenting which I have been able to investigate further and collate the notes of some of these cases, which I desire now to bring forward in substantiation of my statement. It will be observed that the clinical features of the cases bear a strong resemblance to one another. It will not be necessary, however, for my purpose to quote all the cases *in extenso*.

The object of this communication will be to show:

1. The identity of so-called herpes gestationis with the vesicular variety of dermatitis herpetiformis.
2. That certain other forms of so-called herpes reported with various titles are likewise manifestations of the same variety of this disease.
3. That certain cases reported as "peculiar forms of pemphigus" must also be viewed as examples of the vesicular or bullous varieties of this disease.
4. That instances of dermatitis herpetiformis are also to be found in literature under the title "hydra" and under divers other captions.

In view of the fact that the general features of dermatitis herpetiformis have been so fully described by me, and, moreover, that numerous examples of the

disease portraying the more important varieties of the process have been reported during the past year,¹ it will not be necessary to reconsider the disease on the present occasion beyond pointing out the principal features of the two varieties which concern this paper, namely, the vesicular and bullous. The following is an abstract of the original description of the vesicular variety.

It is characterized by variously sized, varying from a pin-head to a pea, flat or raised, irregularly shaped or stellate, glistening, pale-yellowish or pearly, usually firm or tensely distended vesicles, as a rule, unaccompanied by areolæ. In their early stages they can be seen only with difficulty, and are liable to be overlooked in the examination. Sometimes they can only be detected or seen to advantage in an oblique light. In size they vary extremely, large and small being formed side by side, and in this respect they differ from the vesicles of eczema. Here and there papules, papulo-vesicles, vesicopustules, and small blebs will sometimes be encountered. The eruption as a whole is disseminate, the lesions existing scattered more or less profusely over a given region, as, for example, the neck or the back, but they are for the most part aggregated in the form of small clusters or groups of two, three or more; or there may be patches here and there as large as a silver dollar, upon which a number will be seated. When in close proximity they incline to coalesce, as in herpes zoster, forming multilocular vesicles or small blebs. Where this occurs they are generally slightly raised and are surrounded with a pale or reddish areola, which shows forth the irregular, angular or stellate outline of the lesion. At this stage, moreover, the little cluster will generally present a "puckered" or "drawn up" appearance, indicative of its herpetic nature. The eruption is usually profuse, sometimes to the extent of the upper extremities, trunk and thighs being well covered. It may attack any region, but the neck, chest, back, abdomen, upper extremities and thighs are especially liable to invasion.

The most striking symptom is the itching. Not infrequently burning is also complained of. Itching, however, predominates, and is violent or intense. It is altogether disproportionately in excess of the amount of eruption. It is, moreover, a persistent itching, causing the sufferer to scratch constantly. It generally precedes the outbreak, and does not abate until the lesions have been ruptured. From my observation I should say that it is usually more severe and more lasting than

¹ Notes of a Case of Dermatitis Herpetiformis Extending over Eleven Years, illustrating the Several Varieties of the Disease. Philadelphia Medical Times, July 12, 1884.

Case of Dermatitis Herpetiformis (Multiformis) Aggravated by Pregnancy and Irregular Menstruation. THE MEDICAL NEWS, July 19, 1884.

A Case of Dermatitis Herpetiformis (Bullosa). The New York Medical Journal, July 19, 1884.

Case of Dermatitis Herpetiformis, illustrating in Particular the Pustular Variety (Impetigo Herpetiformis of Hebra). Journal of Cutaneous and Venereal Diseases, Aug. 1884.

Notes of a Case of Dermatitis Herpetiformis During Thirteen Years. The N. Y. Med. Jour., Nov. 15, 1884.

Case of Dermatitis Herpetiformis, with Peculiar Gelatinous Lesions. THE MEDICAL NEWS, March 7, 1885.

Case of Dermatitis Herpetiformis Caused by Nervous Shock. Amer. Jour. Med. Sci., Jan. 1885.

¹ Read before the American Dermatological Association at the Ninth Annual Meeting, August 27, 1885.

² Journal of the American Medical Association, Aug. 30, 1884.

³ American Journal of the Medical Sciences, Oct. 1884.

⁴ Published in THE MEDICAL NEWS, Nov. 22, 1884.

in vesicular eczema. The vesicles generally make their appearance slowly, so that several days or a week may be required for their complete development. Notwithstanding the fact that scratching is indulged in in the early stages of the disease, excoriations are not prominent, owing to the fact that the lesions do not readily rupture, and, also, that they incline to refill immediately on being evacuated.

If we look into the subject of herpes gestationis, it will be found that the term was introduced by Milton in 1872. Previous to this date, in 1867, Erasmus Wilson¹ gave brief notes of two examples of a disease which he designated "herpes circinatus bullosus," considering them in a chapter devoted to the "chronic forms of herpes." In both cases the disease was associated with pregnancy, beginning with conception and ending with the completion of parturition. Mr. Wilson describes them as follows: "Both cases were remarkable for perpetual irritation and intense pruritic suffering. The bullæ were of the flat and foliaceous kind, some filled with limpid serum and others with a mucopurulent fluid, and were associated with moist excoriations, thin crusts, papulæ, and pruritus. In one patient the cutaneous disease was the first intimation of pregnancy; the disease continued during the whole period, accompanied four or five pregnancies in succession, and completely exhausted her strength and health. In other respects, and in the intervals of being pregnant, she was a strong and healthy woman. The other patient was a woman aged thirty-six, the mother of nine children. The eruption made its appearance with the fourth pregnancy, and has accompanied every pregnancy since. When parturition was over the eruption ceased; but on the last occasion, nine months ago, it remained, and has now assumed a permanent character. In both cases the eruption was accompanied with sympathetic gastric disturbance and with a duskiness and cachexia of the skin."

It is evident that the cases illustrate the "herpes gestationis" of certain more recent writers, and, as I have stated elsewhere, that the disease is the same as described later by Hebra under the titles "herpes impetiginiformis" and "impetigo herpetiformis." It must be remarked, however, that Wilson gives no special account of the lesions, nor of the peculiarities of the disease, and it is doubtless for this reason that the attention of dermatologists was not fairly directed to the subject until Milton's report of a case in the *Journal of Cutaneous Medicine*, Vol. i., No. 3, the paper being designated "on certain unusual forms of vesicular eruption," and the disease classed as an example of the "herpes circinatus bullosus" of Wilson. In Milton's work on the "pathology and treatment of skin diseases," published a few years later, this case is again brought forward, on this occasion with the name "herpes gestationis."

The disease occurred in a woman aged forty-five, who was in the fourth month of her eighth pregnancy. It began with intense itching, smarting, and heat of the skin of the arms and forearms, upon which parts a vesicular and bullous eruption soon developed. The lesions were the size of a small pea, and gener-

ally in groups of two to four. They were mostly prominent and pointed in shape, but some were oblong with the ends apparently communicating. The disease developed rapidly, so that in a few days the greater part of the body was involved. There was constitutional disturbance, and the local irritation was most distressing. Two weeks after delivery she was on the road to recovery. She had had similar attacks twice previously, with her first and fifth pregnancies.

We next meet with Bulkley's case,¹ which he, likewise, designated "herpes gestationis," adopting the name proposed by Milton. The case was that of a married woman, thirty-two years of age, who was confined with her first child. The cutaneous manifestations appeared two months previous to her delivery, on the hands and feet, and subsequently involving the greater part of the general surface. It began in the form of papules, which rapidly passed into vesicles, and later blebs developed. The vesicles, which were generally in groups, varied in size from very minute elevations to large blebs. After they had ruptured a brownish stain remained. There was at no time any resemblance to vesicular eczema, nor did the lesions pass into pustules. The eruption was attended with intense itching, and later with much prostration and considerable fever.

The disease disappeared after delivery, but recurred with her second pregnancy.

If we look into the four cases just quoted, it will be seen that they resemble one another closely in their clinical features, and that the cause (pregnancy) in all was the same, from which fact both Milton and Bulkley concluded that the term herpes gestationis was expressive and appropriate. This name, as is well known, has since been employed by other observers reporting like cases, and would not be criticised were it not for the fact that the affection is also encountered in men,—an observation which my articles and several of my published cases show; also that it may occur associated with other primary lesions than vesicles, thus rendering the name herpes inappropriate and misleading. The name proposed by Mr. Wilson is even more descriptive than herpes gestationis, and has the advantage of being non-committal as to the etiology of the process. But the term is not sufficiently comprehensive to include other known manifestations of the same extensive pathological process which cannot be regarded either as varieties of herpes (as this term is understood by dermatologists) nor as having either circinate characteristics or blebs. Thus, we note that while the titles proposed by these observers answered the purpose provisionally, recent studies have demonstrated that this form of disease is but one variety of an extended multifiform cutaneous process.

Several other cases, some of them possessing peculiarities, may be cited.

Beverhout Thompson gives brief notes of a case² of "herpes gestationis," following Milton and Bulkley, which must be looked upon as the mildest expression of the disease. The patient was a woman, aged

¹ Diseases of the Skin, 6th edition, p. 294. London, 1867.

² London, 1872.

¹ Amer. Jour. of Obstetrics, Feb. 1874.

² Archives of Dermatology, Oct. 1875.

twenty, in the eighth month of pregnancy, the eruption consisting of grouped vesicles and blebs, which were confined to the fingers, toes, backs of hand and wrists, feet and ankles. The attack was an acute one, recovery taking place after delivery, which occurred three weeks after the beginning of the cutaneous manifestations.

With the title "clinical remarks on a case of herpes gestationis," Living¹ reports a case that had been under his observation in Middlesex Hospital occurring in a woman thirty-seven years of age. The principal features may be briefly cited. The third day after delivery "a copious eruption of scattered solid papules and discrete vesicles appeared; the latter quickly developed into blebs of various sizes. . . . The bullæ had a tendency to form groups, but were all discrete, the skin in the neighborhood being more or less covered with scattered solid papules as large as good-sized shot. The itching was intense." Here there was present a marked papular element, the disease being characterized by papules, vesicles, and blebs, and the use of the term herpes, it must be noted, is altogether inappropriate and fails to convey an idea of the clinical picture.

Cottle² presents an article on "herpes gestationis," in which a case is given, which illustrates more particularly the multiform variety of dermatitis herpetiformis. The patient was a woman, thirty-eight years of age, the cutaneous manifestation in the first attack, in the first pregnancy, being urticarial in form—in "bumps," to quote the author. In the second attack it was of the same character, but in the third it occurred in the form of relapsing blebs and vesicles. In the same paper mention is made of another similar case, where the lesions were hard papules which later developed into small blisters.

Gale's³ two cases ("herpes gestationis") may also be referred to briefly. The first was that of a woman, aged thirty-nine, who had suffered on six occasions, usually four days previous to her confinement. It is stated that the disease began like "erythema papulosum," later blebs appearing, and that there was no pigmentation or grouping of the lesions. The second case occurred in a woman thirty-four years of age, the disease having appeared no less than eight times in a period of eleven years, accompanying her pregnancies.

Walter G. Smith⁴ with the heading "herpes (hydroa) gestationis," gives the notes of a remarkable case, showing the multiform variety of dermatitis herpetiformis. The patient, aged thirty-five, had been married thirteen years, during which time she had experienced two miscarriages and seven full-term pregnancies. Five years before while pregnant with her third child, in about the sixth month, an eruption, similar to that for which she sought advice, appeared like "ringworm" around the umbilicus, spreading rapidly over the body and limbs. It persisted during gestation and for two months subsequently, and was accompanied by intense irritation,

itching, and burning. She remained perfectly free from any cutaneous disease until three months pregnant with the seventh child, the eruption appearing around the umbilicus in exactly the same way as in the first attack, namely, as a cluster of papules or vesicles. Within the first week after parturition the eruption underwent a great aggravation. "Large vesicles and blebs formed, and when punctured clear fluid spurted out with force." When the child was three months old the affection had nearly disappeared, but subsequently a relapse occurred.

The following is an abstract of Dr. Smith's description of the disease at the date of observation. Numerous irregular clusters and groups of papulo-vesicles, and pigmentary stains of the vesicles on the arms; clusters of pimples on the thighs and knees, disseminate lesions down the legs, and blebs on the soles of the feet. Later, there were still to be found a few papules and imperfect vesicles, which looked and felt like the first stage of a variolous eruption."

. . . . After each delivery that was preceded by the eruption the nails fell off the hands and feet. At present all the nails are marked with transverse furrows. The eruption came out in successive crops, and each outburst was preceded by a feeling of itching and heat.

The case brings to mind that reported by Bærensprung with the name "herpes circinatus," and depicted in his *Atlas of Skin Diseases*. Hebra regarded this case as illustrating his "impetigo herpetiformis," an observation to which I have elsewhere directed attention.

French writers, with some exceptions, do not seem to have recognized herpes gestationis. M. Barthélemy, however, in his translation of my *Treatise on Diseases of the Skin*, in a note states that "it is the same disease as that which Hebra calls impetigo herpetiformis of pregnant women." Among the recent German authors, Kaposi makes no allusion to herpes gestationis. Behrend only incidentally refers to it (quoting Bulkley) in considering the etiology of pemphigus. Nor do we find more than the briefest reference to the subject in a recent volume on skin diseases by Malcolm Morris. He says "herpes gestationis occurs in pregnant or parturient women, but is rarely seen in England." No mention whatever is made of impetigo herpetiformis (Hebra). In this country the latest author, Robinson, makes herpes gestationis a variety of herpes, placing it between the varieties "progenitalis" and "zoster," and stating that it may be regarded as belonging to the herpetic or pemphigus group of cutaneous diseases, and that he has observed two cases. A separate chapter is devoted to impetigo herpetiformis (Hebra).

Other forms of so-called herpes, such as "herpes pemphigoides," "herpes vegetans," "herpes pyæmicus," and "herpes phlyctænoides" may here be referred to. The first of these, described by Devergie, will be considered later in connection with pemphigoid eruptions. Herpes vegetans was employed by Auspitz¹ to designate a case subsequently reported and called by Hebra impetigo herpeti-

¹ Lancet, June 1, 1878, p. 783.

² St. Geo. Hospital Reports, 1879.

³ Lancet, 1880, vol. 1, p. 601.

⁴ Dublin Journ. of Med Sci., March, 1881, p. 70.

¹ Archiv für Derm. u. Syph., 1869, p. 247.

formis, the case being one of the group of Hebra's cases. Neumann, in his *Hand-book of Skin Diseases*, 3d edition, briefly alludes to the same disease, but regards the term herpes pyæmicus as more expressive of the condition.

Gibert¹ describes a case representing an unusual form of disease under the name "herpes phlyctænodes," as follows: The patient was a woman twenty-seven years of age, who was in 1814 for the first time attacked with a "phlyctenoid eruption," the origin of which she attributed to a severe fright, which she experienced on the invasion of France by the allied troops. Ever since, she has been subject to an anomalous eruption of small vesicular elevations, appearing sometimes on the trunk, sometimes on the face, sometimes on the limbs, and by a bright redness of the skin, and intense itching and smarting. Three years later she had more frequent and violent returns of the cutaneous disease; the catamenial periods became painful, and the discharge scanty. Two years afterwards she entered the hospital St. Louis. The dorsal aspect of the hands and forearms was red, swollen, hot, inflamed, and extremely painful to the touch, covered with a number of small vesicles, most of them miliary, others the size of a pin's head, others even that of a small pea. These elevations, first noticed in the form of small red points, became more sensitive as they enlarged. At first they were colorless and transparent, afterwards turbid and opaque, resting on an inflamed base, most of them distinct, some blended and grouped together, discharging a considerable quantity of fluid on bursting. Violent itching, burning heat, and severe smarting accompanied the eruption, producing restlessness, and causing intense suffering to the patient."

The case without doubt, it seems to me, was an example of the vesicular and bullous varieties of dermatitis herpetiformis, and calls to mind, in its similarity as concerns the etiology, the case of Captain K., reported by me with the title "A Case of Dermatitis Herpetiformis Caused by Nervous Shock."

I come now to the consideration of a series of cases which have been grouped by the reporters under the head of "pemphigus," usually with various adjectival qualifications, which are clearly examples not of true pemphigus, but of that multiform and protean process under discussion. That these cases were not regarded as ordinary pemphigus is manifest from the statement of the reporters that they possessed peculiar characters. The titles indicate that the writers (for the most part well-known dermatologists) were at a loss to classify them, such names as "pemphigus herpetiforme," "pemphigus pruriginosus," "pemphigus composé," "pemphigus aigu pruriginosus" and "pemphigus circinatus," showing a varied and uncertain nomenclature.

I shall cite some of these cases, before doing which, however, a brief description of the bullous variety of dermatitis herpetiformis may be presented, the account being an abstract from my original communication.

It is characterized by more or less typical blebs, tense or flaccid, rounded or flat, usually the former, filled with a clear or cloudy fluid, seated upon a non-inflammatory or inflamed base, varying in size from a pea to a walnut, and mostly irregular or angular in outline. They incline to group in clusters of two or three, the skin between them being reddish and more or less puckered. Sometimes in immediate proximity will exist one, two or three or a part of a circle of small, pin-head sized, flat, whitish pustules. Vesicles, small or large, flat or raised, are also generally found near by or disseminated over the affected surface. As in the other varieties of the disease any region may be attacked, but more especially the trunk, upper extremities, and thighs. The lesions are generally soon ruptured, crusting with yellowish, brownish or greenish crusts. They are accompanied by burning or itching, which may prove severe. They must be distinguished from the lesions of pemphigus, with which of course they may be readily confounded, but they are herpetic in character. They differ in that they incline to group, and have a more inflammatory, herpetic aspect, the type of which appearance is seen in herpes zoster. Moreover, around and near the bleb will usually be found vesicles and often pustules, the latter frequently in close proximity.

Looking into the earlier French literature we find Rayer¹ speaking of pemphigus "circinatus" as a variety of this disease; and stating, moreover, that he was the first to notice it. He gives a case, to quote his words, of "acute pemphigus, with simultaneous eruption of bullæ on the right forearm; annular erythema; herpes phlyctænodes." The patient was an unmarried woman, twenty-three years of age, with regular menstruation. The disease began with itching and the appearance of small red spots which were succeeded by small blebs closely crowded together, which gradually became large and increased in number. Here and there they ran together. As a rule, they were without areolæ. Some of them were opaque. Crusts were also present. Annular patches of erythema were also observed.

Another case, reported by Rayer, is that of "chronic pemphigus; bullæ arranged in bands; complication with herpes circinatus." I shall not give the notes of this case because of their unusual length, but it may be stated that, in my opinion, the disease was one of dermatitis herpetiformis;—the peculiar erythematous patches, herpetic groups of vesicles, blebs, the excoriations and the crusting, the itching, the severity of the attack, and lastly, the duration of the disease, all pointing to this disease rather than to any other affection.

Still another case is recorded by Rayer, as one of "chronic pemphigus, presenting isolated bullæ, and clusters of an eruption similar to that of herpes phlyctænodes; amenorrhœa; recovery." The woman was forty-two years of age. There were constitutional disturbance, severe itching, and a copious diffuse eruption of groups of variously shaped and sized blebs, which appeared in successive crops.

Chausit² describes at length two cases, both occurring in women, with the title "pemphigus aigu pruriginosus," which likewise are to be viewed as examples of dermatitis herpetiformis. One of these cases may

¹ A practical treatise on the special diseases of the skin. Translation from the French, London, 1845, p. 118.

¹ Treatise on Diseases of the Skin, English Translation, London, 1835, p. 219.

² Annales des Mal. de la Peau et de Syph., Mars, 1852.

be quoted. A woman, aged 23, of robust constitution and good general health, was delivered of her first child six weeks before full term. At the fifth month of gestation itching and an eruption of numerous minute solid papules upon the body and limbs manifested themselves, the itching increasing in severity as pregnancy advanced. On the fifth day after delivery she experienced even greater itching and general burning, together with fever and some delirium. The following day the whole surface was covered with a confluent efflorescence of large elevated red papules, resembling in some respects those of erythema papulosum. The skin presented the same appearance for two days, and on the third there were noted on the arms a few disseminated transparent blebs varying in size from a haricot-bean to a hazel-nut. The blebs increased in number until on the eleventh day the whole surface, including the face, was invaded, the burning and itching by this date having ceased. The papules disappeared, new blebs, starting as such, coming out from day to day until the seventeenth day when they disappeared leaving brownish stains. A month after there was slight itching over the general surface together with a few groups of papules, but no more blebs formed.

The papular manifestation preceding and following the blebs would in itself be sufficient to differentiate the disease from true pemphigus, the affection with which it might be confounded.

In considering pemphigus, Devergie,¹ under the heading, "pemphigus composé," gives a case with the title, "herpès pemphigoidé," as follows: "The patient was a woman, fifty years of age, who had ceased menstruating five years before. The disease began with itching, followed by an inflammatory patch covered with large vesicles, which rapidly passed into blebs. Soon various regions were invaded, until the whole surface was well covered with eruption. Large red patches, more marked on their periphery than at the centre, surrounded by one or two rings of blebs, crusting in the centre, formed from time to time. The itching was especially marked on the periphery of the patches. The patient recovered."

As in Chausit's case quoted, the multiform erythematous patches here were marked features in the manifestation; also the subsequent evolution of the lesions, all suggesting a peculiar process. This might be compared to an exaggerated erythema multiforme, showing the several varieties of the disease, especially the bullous, rather than to pemphigus. Indeed, I may here state that dermatitis herpetiformis in some cases manifests itself with many of the clinical features of erythema multiforme. Its relation to this disease is a question in my mind already ripe for discussion.

Devergie also alludes very briefly to "pemphigus herpetiforme," which, he states, he has frequently seen invade the whole body, the patient succumbing to the disease as in other forms of pemphigus.

Hardy² divides pemphigus into acute and chronic;

under the latter he makes three varieties; first, le pemphigus bulleux successif; second, le pemphigus foliacé; third, le pemphigus prurigineux. The last variety, which he illustrates with a case, should it seems to me be regarded as an example of the combined vesicular and bullous varieties of dermatitis herpetiformis. The patient was a woman thirty-five years of age, who had already had nine children, and was at the date of observation at the close of the last month of her tenth pregnancy. Since her second pregnancy she had suffered, coming on some weeks after conception, from an itching eruption, involving the whole general surface, characterized by blebs the size of a walnut. At the same time the skin became brown, and the seat of a viscid secretion. The symptoms were augmented up to the time of delivery, after which they subsided insensibly.

Under the title of "pemphigus," Klein¹ gives the notes of a case which some writers (Milton and Bulkley) on herpes gestationis have regarded as an example of that disease, but which, if my views be adopted, must be looked upon as another instance of the combined vesicular and bullous varieties of dermatitis herpetiformis. The case was that of a woman thirty-two years of age, the disease beginning in the seventh month of pregnancy, characterized at first by millet-seed sized vesicles, which subsequently developed into blebs as large as a hen's egg, with contents at first clear but later becoming turbid. At the same time severe pains were present, and the strength of the patient declined. The disease disappeared shortly after delivery.

I have next to observe that, under that vague term "hydra" some cases are found in literature which, I think, might more properly be regarded as examples of dermatitis herpetiformis. Thus, Bulkley² gives the notes of "two cases of hydra," which were read before the New York Dermatological Society, and which it seems should be regarded as examples of that disease. The first case was a married lady, 40 years of age, "who presented a very anomalous eruption, which was then composed largely of bullæ." Three months previously, while in Europe, the disease had been diagnosed eczema by several dermatologists, and was there treated, but with little success. The description given by Dr. Bulkley, especially as relates to the bullæ; the "moist exuding portions of surface;" the "almost unbearable itching;" the constitutional disturbance; the wide extent of the eruption; and the course of the disease, are peculiar and unusual. The case, I think, should rather be classed as an instance of dermatitis herpetiformis than as one of so-called hydra, the existence of which latter disease, viewed as a distinct process, I am not willing to admit.

In the second case occurring in a married lady aged 26, the first outbreak consisted of erythematous patches, which burned and smarted, and passed away in a few days. Six weeks later there was an attack of

¹ Mal. de la Peau, Paris, 1857, p. 309.

² Leçons sur les Mal. de la Peau, 2d part, p. 136, 2d ed., Paris, 1863.

¹ Allg. Med. Zeitung, Vienna, August 6, 1867; quoted in Jour. Cutan. Med., 1868, p. 203.

² Archives of Dermatology, April, 1877.

blebs, preceded by considerable itching; later there was irritation of the skin, red erythematous patches, and blebs, occupying both arms and forearms, left shoulder and back, left leg and face. In both cases there were marked neurotic elements.

I shall only allude to two other cases. In an article bearing the title "Über die coincidenz von Erkrankungen der Haut und der grauen Achse des Rückenmarkes," Jarisch¹ gives the particulars of an unusual case, upon which his observations on the spinal cord were based, with the diagnosis "herpes iris," to which I must refer. The patient was a married woman sixty-one years of age. In 1874 she is said to have had disseminated blebs upon her face and on the arms, which disappeared spontaneously. In 1879 she was admitted to the Vienna General Hospital with an abundant, symmetrically disposed, vesicular, bullous and pustular eruption confined almost exclusively to the upper half of the body, including the upper extremities and head. The face and scalp were much swollen, reddened, and covered with crusts or with isolated and grouped blebs seated on a dark bluish-red base. Both arms and forearms showed a large number, for the most part grouped, of pin-head sized papules and vesicles, with hazel-nut sized blebs or epidermis elevations the size of a dollar seated upon inflamed skin. Upon both surfaces of the thorax the epidermis in patches the size of a hand was loose or detached. In addition, over the whole diseased surface, superficial, crowded, millet-seed sized pustules with bright-red areolæ existed. Upon the abdomen, dark bluish-red, slightly scaly papules occurred in groups. The epidermis of both soles of the feet was raised in the form of a hemorrhagic bleb. The mucous membrane of the tongue was dried, the rest of the mouth swollen, reddened, and in places excoriated. There was considerable fever, and the patient was very weak and debilitated. Some days later the eruption disappeared in great part, and was followed by scaling, crusting and brownish pigmentation. In the course of the next month the patient suffered new eruptions of vesicles, bedsores, abscess, and died; the autopsy disclosed Bright's disease of the kidney in the third stage and lobular pneumonia, with changes in the spinal cord extending from the third cervical to the eighth dorsal vertebra. The disease of the skin, it will be remembered, extended from the vertex to the region of the navel. In the report nothing is said of the subjective symptoms. I have referred to the case because it has sufficient points in common with dermatitis herpetiformis to warrant its being classed here rather than elsewhere.

Another peculiar case worthy of record here is that reported by Dr. P. Meyer,² of Strasburg, with the title "a fatal pemphigus-like dermatitis with changes in the nervous system," occurring in a previously healthy and well-nourished man sixty-five years of age. The disease began as a diffuse "eczema," showing the varieties "papulosum," "vesiculosum," and "rubrum," unaccompanied, at first, by constitutional

symptoms. Up to this time it seemed to be a simple eczema. About the fourth week irregularly scattered large blebs appeared on the buttocks and lower extremities, with sudden loss of appetite, increased frequency of pulse, higher temperature, and other signs of constitutional disturbance. The patient began to fail rapidly, the disease now taking on the form of a malignant pemphigus foliaceus, and died; the whole disease ran a rapid course of seven weeks. The case presents certain cutaneous symptoms common to dermatitis herpetiformis, and is entitled to mention in this connection because of the great multififormity of the lesions that may occur with skin diseases of this nature, that is, those depending upon disturbance of or changes in the nervous system.

REPORT OF TWO CASES OF PERFORATION OF THE MASTOID CELLS FOR SUPPURATION OF THE MIDDLE EAR.

BY J. D. STRAWBRIDGE, M.D.,
OF DANVILLE, PA.

In December last, while visiting with Dr. George Strawbridge, the Philadelphia Dispensary for Diseases of the Eye and Ear, at the corner of Thirteenth and Chestnut Streets, a child was presented with a large abscess of the mastoid. The abscess was opened, and in the conversation which followed, I was asked by Dr. Strawbridge, "How do you open the mastoid cells?" I answered, "I have done it with a *gimlet*!" The expression of incredulity which passed over the countenances of several gentlemen present, is the *motive*, and must be my *excuse*, for reporting the following cases, the first almost entirely from memory. The facts are as indelibly fixed in my mind as if it had occurred but yesterday. The date has been fixed from the recollection of several persons then residents in the vicinity, who saw the patient during his illness, and knew of the operation.

CASE I.—G. R., Englishman, puddler, while at work in a rolling mill, was taken with pain in his right ear. Was attended by an irregular practitioner for over six weeks. While visiting in an adjoining house, I was called in haste to see this man, who was thought to be dying. I found him propped up in bed, in a stupor, with low muttering delirium from which he could not be roused, the whole left side of his head was one enormous abscess, the scalp was raised up from more than half the cranium, the swelling extended nearly across the forehead, around and beneath the eye, closing it. Over nearly the whole side of the face, and down the neck, both in front and behind the sterno-mastoid muscle, the auricle was doubled up, nearly covered by the swelling, and the meatus could not be seen. In fact, looking on the distorted mass from that side alone, it could scarcely be recognized as a human head. Without the least expectation of saving life, I determined to evacuate the abscess and await results. I made a free incision behind the ear down to the bone, a second over the anterior inferior angle of the parietal bone, and a third in the face in front of the ear; from these three openings more than half a pint of horribly offensive pus discharged during my presence.

¹ Viertelj. für Derm. u. Syph., 2 u. 3 Hefte, 1880, p. 195.

² Archiv für path. Anat. u. Phys., Nov. 1883, p. 185.

Directing brandy and milk to be fed to him every twenty minutes, I left the house, expecting to hear of his death before I could return.

At my visit on the following morning I was surprised to find the patient still living. His head and face had nearly resumed their natural form, and stupor was less profound, but delirium with restlessness had increased.

To give any possible chance for life, I recognized the immediate necessity of relieving cerebral pressure by an outlet for discharge of pus from the cavity of the tympanum. This could not be obtained through the swollen and tightly closed meatus. I hoped to find it through a carious mastoid; the incision behind the ear was extended upward above the top of the auricle and downward almost to the point of the mastoid process; finding this insufficient for thorough exploration of the bone, a second incision, on a line with the floor of the meatus, was carried backward at right angles with the first, an inch or more. Turning the flaps backward, a considerable surface of bone was found, rough, and denuded of periosteum, but no softening or opening in the bone, as anticipated. I saw no alternative but to make one, and this I determined to do.

While thinking how it was to be accomplished, as I had no instrument adapted to that purpose or that could be made available, I discovered sticking in the sash of a window a small gimlet, which I at once determined to use. After boring it three or four times into a piece of hard wood to remove rust and dirt from the thread, the point was applied to the side of the mastoid about $\frac{3}{8}$ of an inch below, and $\frac{1}{4}$ of an inch behind the meatus, bored upward and inward until the thread began to fasten itself in the bone, then slightly elevating the handle it was drawn out forcibly to rasp away the crumbled portions of bone. When reapplied the point was directed more strongly forward to avoid endangering the lateral sinus. At a depth of about $\frac{1}{4}$ of an inch a slight oozing of thin sanies appeared, which became more free as the opening was enlarged with the point of the gimlet.

Visiting him again in the evening a slight improvement in his condition was perceptible, restlessness was diminished, he could be roused to a semiconsciousness, and nourishment was taken without difficulty. At my visit on the following morning, to my surprise and gratification, I found the stupor and delirium gone, the mind nearly clear, the patient resting quietly in bed, but excessively debilitated. Improvement from this time was steady and rapid, in two weeks he was able to walk about the house. Discharge of pus continued free for three or four months, when, after removing several pieces from the occipital and temporal bones, the wound healed, and all discharge ceased. The patient soon after left Danville, and I have never heard of him since.

CASE II.—J. K., school-teacher, aged 30 years, was taken with inflammation of the middle ear from which he suffered very severely, but continued attending to all the duties of his school, and did not call on me for advice until the end of the second week. I saw him first one Friday evening, and directed a strong solution of morphia to be dropped

into the ear, with warm fomentations applied over it. He passed a night of much suffering until near morning, when he began to have some relief. At my visit in the morning I found the tympanum had given way, pus was discharging freely from the ear, and his sufferings were almost entirely relieved. On Monday morning he resumed his duties in school, the discharge soon ceased, and in about two weeks he thought himself entirely well.

About two months later a slight discharge from the ear returned with gradually increasing pain. For ten days or more he continued in charge of his school, only seeking relief at the end of the week. There was then considerable swelling over the mastoid, in which slight fluctuation could be felt. A free incision down to the bone gave exit to an ounce or more of dark colored, offensive pus. Examination with a probe showed a small surface of slightly carious bone, but without any opening from the mastoid cells. Encouraged by the success of my first case, I had no hesitation in again resorting to an operation.

Having no instrument for that purpose, I used a small bit set in a handle, with which I easily penetrated the already softened bone, breaking up with a probe still further some of the cancellous structure in the direction of the antrum. A small quantity of thin, offensive matter was discharged. In a few days the pain ceased and the patient resumed charge of his school. I soon after left home and had no further charge of the case. For some years he had occasional offensive discharges from the mastoid, and his hearing is permanently impaired.

CASE III.—E. W., female, aged about 35, went into an ice-house while heated, and was taken a few hours later with pain in her left ear. Inflammation and suppuration of the middle ear followed with intense suffering, only relieved by opiates until rupture of the tympanum occurred, with only partial and temporary mitigation of pain, which soon returned with increased severity, total loss of sleep, great nervous irritability prostration, and delirium. At this point in the case I was first called. A small swelling over the mastoid was present, and increased rapidly. Although no fluctuation could be detected, incision and perforation of the mastoid were urged. But failing to obtain the consent of either the patient or her friends, for some days, warm poultices were applied continuously. Permission to operate was at length reluctantly given, and an incision made over the mastoid, one and one-half inches in length down to the bone, which evacuated not more than two drachms of pus. Notwithstanding, there were no vessels divided, bleeding was very troublesome. As soon as it could be arrested, the bone, which was found smooth and hard, was attacked with a small hand gouge provided for the purpose. Commencing on a line with the floor of the meatus and cutting upward, small slices of bone were removed, until cancellous structure began to appear. This was broken into with a probe, giving outlet to a slight discharge of thin yellow offensive matter; relief was almost immediate, and the patient, who had not slept for more than a few minutes at a time for weeks, soon fell into a profound sleep from which, for more than thirty-six hours, she could scarcely be roused sufficiently

to take necessary food. Recovery was gradual, discharge from the mastoid ceased in the course of the next three weeks. Hearing in that ear remained very imperfect.

CASE IV.—C. K., farmer, aged 54 years, living about four miles from town, called at my office on June 1, 1876, complaining of pain in his left ear. There was no swelling of the meatus, the tympanum was slightly congested, the fauces were inflamed, and the tonsils enlarged. I prescribed for the inflammation, warning him of the threatened disease of the middle ear, and requested him if not materially relieved, to return on the third. He did not return for a week, when he came in and said he was no better. He was again prescribed for, and warned of the danger he was courting, and asked to return at least on the second day. He did not return until June 17th, when he came again complaining that the treatment had done him no good. He was again prescribed for, and warned that if he continued to act as he had been doing, he would have weeks, if not months of suffering, with probable loss of hearing, and possible danger to life, and that he must be seen at least every other day. I did not see him again until the Fourth of July, when I was called out of bed early in the morning to see him. He stood with his head bent forward, his hand encircling his left ear, his face pale and thin, and his whole appearance expressive of the most intense agony. I directed a strong anodyne to be repeated frequently, and ordered him to return home, and promised to see him early the next day. I then learned that in the intervals between his visits to me he had been treating himself by cupping, bleeding, and large doses of quinine as well as a variety of domestic remedies. There had been slight discharge from the ear, but the meatus was now so firmly closed by swelling of its walls that pus could no longer escape. There was some swelling of the mastoid, and also on the face in front of the ear. Any further depletion was out of the question. Anodyne lotions were applied around the ear, and over all warm poultices. Morphia, chloral, and potassium bromide were given in large doses, to procure sleep, of which he had not had more than a few minutes at a time for over a week. I hoped to obtain some discharge through the meatus, but failing in that, and swelling increasing rapidly both in front and behind the ear, incision of the mastoid became imperative. Commencing on a line with the top of the ear, an incision was carried down to the point of the mastoid process, and over one and one-half inches in depth before reaching the bone; a branch of the posterior auricular artery was divided which, in consequence of the great infiltration of surrounding tissues, and its depth in the wound, I failed to ligate, and considerable blood was lost before the hemorrhage could be arrested by compression of the wound. There was no suppuration present and the periosteum remained uninjured. On the second day the compresses were removed without bleeding, and warm poultices applied for several days without relief. Swelling on the face had rapidly increased until the eye was nearly closed. Perforation of the mastoid seemed to be imperatively demanded.

On the following morning, assisted by one of my

students, I removed the dressing, preparatory to operation, and found the wound filled with a clot of blood, the removal of which was followed by a strong jet from the divided artery, and five or six ounces of blood were lost before a ligature could be applied. The patient was so much enfeebled that further interference seemed unwise, and was abandoned for the time being. A few days later, after the patient had rallied a little from the loss of blood, without the use of an anæsthetic, I perforated the mastoid with a small bit similar to those used by Dr. Buck, which I had procured and used successfully for drilling the bone in a case of ununited fracture of the tibia. The drill was applied to the mastoid at the level of the floor of the meatus, and directed slightly upward, forward, and inward. At a depth of about three lines I felt that the instrument had passed the hard shell of bone, and was entering a softer and more friable structure. The bit was laid aside, and with a probe the way was readily opened into the antrum. A slight discharge of pus followed through the opening. Swelling of the face continued to increase, and I was compelled to make incisions both above and below the zygoma. Notwithstanding this, the abscess afterward opened and discharged freely within the outer angle of the eye. The abscess healed in a few weeks. All pain ceased in a few days after opening the mastoid. Syringing of the cavity of the tympanum was not resorted to in any one of these cases. A few days ago I saw this patient, and he informed me that he now hears better with that ear than he does with the right ear, which has never been diseased.

The second and third patients are living, and to be seen almost every day, although I have not lately inquired into their condition of hearing.

The first of these cases, related from memory, occurred in the fall, or late in the summer, of 1850, within three years after I commenced the practice of medicine. Aural surgery was then comparatively in its infancy, and had made but little progress toward its present advanced position. I had only read the works of Itard and Kramer on the ear, neither of whom mentions or seems to have thought of opening the mastoid cells as a means of relief from the danger of suppuration of the middle ear. Kramer, in treating of "internal inflammation of the ear," says:

A sure guide is not unfrequently met with in the simultaneous affection of the mastoid process. . . . On being laid open, either naturally or artificially, the bone is found to be carious; by carefully giving the probe a proper direction, it may thus be introduced into the cavity of the tympanum."

Again he says:

"Laying open the mastoid process is of much more importance. Whenever fluctuation is discovered, or even when the periosteum yields to the pressure of the finger, the integuments should then be divided, and, if necessary, the *periosteum* also."

Thus clearly showing that he never contemplated any artificial opening into the mastoid cells, other than the mere passage of a probe through broken-down, carious bone. Although I knew of the operations of Petit and Jasser and of the death of Baron

von Burger, which operations had been done for the relief of deafness, I had never heard of its being done for the relief of suppuration of the middle ear. Guided by the teaching of Kramer, I expected to find an easy passage to the middle ear through carious bone, but, defeated in that, I was illy prepared to encounter so formidable a case. Left to my own resources, I had to act in the emergency without precedent or authority, and without time for consultation or study. Had my case been less hopeless, I would probably have hesitated long before resorting to so hazardous an expedient. Although the anatomical relations of the mastoid region were still fresh in my memory, I had a wholesome fear of injuring the lateral sinus, and selected a point somewhat lower than is now considered best for reaching the antrum.

When I encountered my second case I had read the works of Wilde and Toynbee, was acquainted with the operations of Von Troeltsch, and had no hesitation as to the propriety or necessity of the operation. The only question was, what instrument can be used, as I had none for that purpose. Accustomed to work occasionally in the shop of a gunsmith on the opposite side of the street from my office, who often made and repaired surgical apparatus for me, I remembered a drill which I had frequently used, and which seemed to furnish just the instrument required. One of the bits was selected and fixed in an ordinary handle; it answered the purpose admirably, and I have never used a better instrument.

In the third case a small gouge was borrowed from a cabinetmaker, and used as successfully as the others. The drill would, perhaps, have been better adapted to this case, as the gouge would have been to the former.

The drill and bits of A. H. Buck, now generally recommended, are convenient and well adapted to opening the mastoid cells; but I can conceive of no instrument that equals in any respect the burrs of the surgical engine.

A CASE OF EXCISION OF EPITHELIAL CANCER OF THE RECTUM.

BY M. F. MERCHANT, M.D.,
OF GENOA, N. Y.

G. A. W., æt. 67, farmer. Health generally good until beginning of present difficulty, which first attracted his attention about January, 1884, consisting of soreness and irritability of rectum, followed in a few weeks by a sero-purulent discharge, often containing considerable blood. Pain increased, becoming more severe at night, and extending down the limbs.

Examination proved the rectum to be the seat of an extensive, hard, and nodular deposit, containing both mucous and tegumentary structure, and extending three and one-half inches up the gut and firmly embedded in its coats. The upper part of the cancerous growth nearly encircled the bowel, while below the deposit was more lateral and posterior. At the margin of the anus, the walls of the rectum had

sloughed through posteriorly, destroying the external sphincter muscle.

As the growth could be entirely reached by the index finger, and there appeared to be no undermining of the constitution, with no perceptible enlargement of the glands of the system, the removal of tumor was advised, and, after full consideration, he consented to the operation.

On the 1st of February, 1885, the bowels having been previously emptied, the patient was brought well under the influence of ether, and placed in the lithotomy position.

Assisted by Drs. Frederick Hyde and M. B. Van Buskirk, the operation was performed by carrying an incision entirely around the anus, keeping well outside of all diseased tissue, to the superficial fascia. The gut and tumor were separated from the surrounding healthy structures as much as possible with the finger and handle of the scalpel, using the knife where necessary to separate too firm adhesions. After the removal of all diseased tissues, the gut was drawn down and divided with the knife, removing three and a half inches of the bowel. The divided end was attached to the integument by silk sutures, except posteriorly, where too much tissue had been removed.

The flow of blood was not great. A simple water dressing was applied, held in place by a T bandage, one-fourth grain of morphine given, and patient placed in bed.

Bowels were kept confined for six days, and after second day wound was dressed with carbolized oil and lint.

Slight tympanites occurred on the second day, but soon subsided. Surgical fever was mild, with healthy discharge.

In four weeks patient began to sit up, and in three months was able to be about and perform light work. He experiences no difficulty in retaining feces, except when bowels are lax, and up to time of present writing has continued to improve, and there is no indication of a return of the disease.

MEDICAL PROGRESS.

LAPAROTOMY FOR ECHINOCOCCUS OF THE SPLEEN.—DR. ANTONIO FIBBI, on September 2d, performed the operation of laparotomy for the removal of an enormous suppurating echinococcus cyst of the spleen. The seventh day after operation the patient was in a favorable condition, and recovery seemed probable. At no time after the removal of the tumor did the temperature rise above the normal.—*Gazzetta Medica de Torino*, September 15, 1885.

PURULENT ENDOMETRITIS DURING PREGNANCY.—DR. DOUAT records a case of purulent endometritis occurring during pregnancy. This disease subsequent to confinement is an ordinary occurrence, but until the present time no case has been published of its existence during pregnancy. The present observation is therefore unique.

A woman aged twenty-seven years, in whom menstruation had occurred since the age of fourteen, and

whose history showed no syphilitic infection or other constitutional disease, entered the clinic at Leipsic, where pregnancy at term was diagnosticated. Labor was rapid and easy.

The amniotic fluid was of a dark green and yellow color, and contained numerous pus corpuscles.

Examination of the placenta and its membranes showed the presence of adhesions and an unnatural condition of the amnion and chorion, between which pus was found. Upon the borders of the placenta the true decidua was infiltrated with traces of thickened pus, and the decidua reflexa was likewise infiltrated with pus. There was no trace of the gonococcus, and it was evident that the purulent process had begun both in the uterine and ovarian decidua.

The purulent cells were found scattered between the membranes and had given rise to small abscesses.

As to the cause of the condition, it may in part be attributed to blennorrhagic infection and partly to attempt to produce abortion.

The patient for a long time had been affected with leucorrhœa and presented other physical signs of endometritis.

The chief interest in the case is however, the fact, that purulent endometritis could exist during pregnancy without interrupting its course.—*Archiv für Gynäkologie*, xxix. 3, 1883.

THE BREASTS OF MALE CONSUMPTIVES.—According to M. LEUDET, there sometimes exists a congestive swelling of the breast of male consumptives that is related to the pulmonary disease. There is no deposit of tubercle. The author has observed three cases of this mammary enlargement. The breast is first swollen throughout, and has the characters of a disk whose diameter is about three to five centimetres. The skin that covers the gland does not exhibit any change in color, and the subjacent connective tissue is unaffected. After one gland has enlarged the opposite organ may be affected. Pain is experienced in the diseased gland, and may radiate round the thoracic wall. This swelling is especially liable to occur on the side the lung of which is most diseased, or when pleuritic attacks are notably present. The swelling is regarded as due to a congestion, the result of irradiation from the central disease. The lymphatic glands are not swollen. After lasting from one to several months, the swollen mamma returns slowly to its normal size; suppuration has not been known to occur.—*The Lancet*, Sept. 19, 1885.

THE CAUSES OF RAPID DEATH FROM INTERNAL COMBUSTION.—DR. ALBERTO SEVERI, in an elaborate paper upon internal combustion, and from what reasons it may become rapidly fatal, arrives at the following conclusions.

The factors by which death is produced are:

1. Depression of the vascular tonicity. In the condition under consideration, there is primarily an exaggerated excitation of the bulbar centres of the brain, and hence consecutive depression and paralysis of the same centres.

2. Superheating of the blood. Although the temperature may not be sufficiently high to destroy the corpuscles, as is the opinion of Lesser, this result, according to Trojanoff, is obtained by a temperature of 125½° F.,

which serves also, in part, to produce paralysis of the circulatory centre.

3. The separation and introduction into the circulation of flocculi and small clots, which are found in the heated zone, by the action of the heart and by changes in the vessel walls. Such clots, in the right heart and pulmonary vessels may become nuclei of extensive coagula, and on the other hand they may directly form emboli in the ramifications of the pulmonary vessels. The phenomena which are present during the life of the animal in the first twenty-four hours, and the necroscopic appearances are perfectly in accord with its interpretation.—*Lo Sperimentale*, August, 1885.

THE PATHOGENY OF CERTAIN PARALYTIC SEIZURES OBSERVED IN THE AGED; THEIR PROBABLE RELATION WITH URÆMIA.—DR. RAYMOND, in a series of studies made in the laboratory of M. Velpeau, on the pathogeny of some forms of paralysis observed in old men, and their probable relation with uræmia, holds that in old men

1. Differential diagnosis should be made between cerebral softening or hemorrhage, and certain apoplectic and paralytic phenomena, seemingly connected indirectly with uræmia, or at least appearing to be caused by it under the influence of cerebral œdema.

2. This differential diagnosis is generally very difficult; however, the resistance of premonitory symptoms—such as vertigo, gastric derangement, the demonstration of pulmonary and local œdema, and the presence of albumen in the urine—should lead to the suspicion of uræmia.

3. These paralytic attacks are sometimes due to an old lesion, but frequently they occur without apparent cause.

4. The œdematous condition of the cerebral tissue and ventricular dropsy are the factors which unite to produce paralysis of this nature, either by exciting an old lesion, or by producing differences in the condition of the cerebral hemispheres, not however recognizable by post-mortem examination.

Dr. Raymond further concludes from observed clinical facts and his experiments in proof of the preceding, that

1. In the aged mortal, apoplectic attacks, or at least attacks which are followed by mild hemiplegia, and which simulate the character of hemiplegia, result from cerebral softening, or hemorrhage may occur.

2. Such attacks are due to a condition of uræmia.

3. Autopsy shows, sometimes the existence of an old lesion, and at others simply a generalized œdema of the brain.

4. The pathogeny of these attacks seems in every case to be related with cerebral œdema, and to disorders of circulation resulting from it. These disorders, whether they be congestive or anæmic in their nature, lead to want of oxygen in the cerebral blood supply.

5. It is therefore important as concerning diagnosis, prognosis, and treatment, to give due significance to such clinical and pathological facts, in order to avoid serious errors in appreciating the symptomatology.

6. Cases of sudden death in the aged may be explained by the condition under consideration, a fact of importance in legal medicine.

7. Coincidence in the same patient, of old hemiplegia

and chronic nephritis with uræmic tendency, may be the point of departure for convulsive seizures, limited chiefly to the paralyzed side. Disregard of the cases previously studied will lead to clinical errors.

8. Many authors have recorded cases of hemiplegia, absolutely inexplicable by appearances recognized at autopsy. Is it not probable that such belong to the class to which attention is here called?—*Revue de Médecine*, September, 1885.

PHYSIOLOGICAL ACTION OF THEINE.—DR. THOMAS J. MAYS, as a result of his experiments upon frogs, concerning the physiological action of theine, concludes:

1. That the anterior part of the body is influenced before the posterior.
2. That it paralyzes sensation before motion.
3. That it impairs sensibility from the centre, and not from the periphery. This is also true of motility.
4. That it produces convulsions which are spinal.
5. That before or during the spasmodic stage there is marked hyperæsthesia.
6. That the general muscular rigidity produced by caffeine when introduced subcutaneously is not present in theine poisoning.
7. That its local action does not produce the characteristic muscular stiffness of caffeine.
8. That it has a more powerful action on the sensory nerve-centres, and less on the motor nerve-centres, than caffeine.—*Therapeutic Gazette*, September 15, 1885.

PHYSIOLOGICAL ACTION OF GUARANINE.—DR. THOMAS J. MAYS, from experiments on the frog, to determine the physiological action of guaranine, concludes:

1. That it affects both sensory and motor nerves, the former before the latter.
2. That it paralyzes sensation and motion from the spinal centres, and not, like brucine and cocaine, from the periphery.
3. That it produces hyperæsthesia of the whole body, and after which convulsions.
4. That its convulsions are spinal and not cerebral.
5. That it first increases and then decreases respiration.
6. That it differs in its action from caffeine in that it has a stronger affinity for sensory and less for motor nerves than the latter agent, and that it is more analogous to theine in its physiological action.
7. That it first increases then decreases respiration, and arrests the heart in systole.—*Therapeutic Gazette*, September 15, 1885.

FOREIGN BODIES IN THE CONJUNCTIVA.—DE WEAVER recommends the appended formula for relief of photophobia and orbicular spasm, antecedent to the removal of foreign bodies from the conjunctiva.

R.—Aque dest. 3iss.
Cocaine, hydrochlor. . . . gr. iv.
Hydrargyr. chlor. corros. . . gr. $\frac{1}{10}$.—M.
S.—Two drops into the eye.

The preparation is preferable to that containing atropia, on account of absence of mydriatic effect upon the pupil.—*Revue de Thérapeutique*, September 1, 1885.

A NEW TEST TO DISCOVER THE PRESENCE OF BLOOD IN THE URINE.—DR. ANTONIO LUCHINI proposes the following test for the presence of blood in the urine, which possesses the advantage of preserving the natural color of the blood:

Ten c. c. of urine, acidulated with a drop of acetic acid, are agitated while cold with three c. c. of chloroform; when allowed to stand, the chloroform will rise to the top, and will be colored more or less intensely, according to the quantity of blood originally present in the urine.

Dr. Luchini has proved the efficiency of the test with ten c. c. of a mixture containing only three drops of blood in 250 c. c. of distilled water.—*Gazzetta degli Ospitali*, September 9, 1885.

THE REGENERATION OF OSSEOUS TISSUE.—DR. A. BONOME (*Arch. Sci. Med.*, vol. ix. 2) gives the following résumé of his experiments upon the transplantation of osseous tissue.

1. The periosteum early manifests, even within thirty-six hours, energetic regenerative processes, by proliferation of the cells of the osteogenetic layer, even when transplanted between muscles or tissues of different nature, such as the anterior chamber of the eye and the iris; it is not developed in nutrient gelatine.

2. The osseous substance, properly so called, isolated from the medulla and periosteum, produces the formation of osteoid trabeculae through the medium of osteoblasts of the superficial layer, precisely as occurs in bone deprived of the periosteum.

3. Transplantation of the medulla gives negative results.—*Lo Sperimentale*, August, 1885.

EXPERIMENTAL RESEARCHES IN TUBERCULOSIS.—E. DE RENZI, in the *Rev. Clin. e. Ter.*, No. 7, 1885, with a view to decide certain disputed points concerning the nature of tuberculosis, initiated a series of investigations:

1. Concerning the presence of tubercular virus in the blood.

To determine this point, five experiments were performed, by injecting two or three drops of the blood of phthisical patients into the subcutaneous cellular tissue, and the following conclusions reached:

a. In the blood of a patient ill with primary tubercular meningitis, the tubercular virus was present without doubt.

b. The blood of a scrofulous young girl probably contained the same virus.

c. In the blood of phthisical patients, collected with great care, the virus existed, but in less quantity than was found in the sputa.

d. The blood of the same patient did not always reproduce tuberculosis in animals, and this may be explained by the small number of bacteria present, and the different degrees of resistance in animals.

2. To determine the infectious power of the feces of scrofulous and phthisical patients.

To elucidate this point, three experiments were performed, two by injecting some grammes of diarrhoeic feces, and in the third case, of tubercular sputa, into the rectum. The results of these experiments seem to show that the disease is inoculated with difficulty in the lower

intestinal tract, and when produced is very slow in its development.

It is probable indeed that the feces are free from tubercular virus, and further experiment is necessary to decide the question.

3. The influence of suckling upon the production of tuberculosis.

After six experiments to determine this point, the author concludes that mothers do not directly communicate this virus to children through the medium of the milk.

4. The influence of pneumothorax upon the course of phthisis in cavities.

Referring to his observation made upon a phthisical patient in whom he was able to confirm sensible improvement after the development of the pneumothorax, and describing similar cases reported by others, and having examined the question experimentally, the author concludes

a. That pneumothorax in cavities is easily cured and produces only transitory dyspnoea immediately after the operation.

b. That in cavities in which an attempt to establish pneumothorax was made, the progress of the phthisis was not sensibly modified, nor on section was any difference found between the lungs, notwithstanding the operation was extensively practised.—*Rivista Internazionale de Medicina e Chirurgia*, July–August, 1885.

TWO CASES OF HERPES WITH MOTOR PARALYSIS.—DR. G. WALLER communicates to *The Weekblad of Amsterdam*, notes of two cases of herpes, in which motor nerves were affected. A widow-woman, aged 68, had a painful patch of herpes, covering the whole of the right side of the face, stopping abruptly at the middle line. After some weeks the herpetic spots and the pain disappeared, being, however, replaced by paralysis of the same side of the face, with loss of taste on the right half of the tongue. The other case was that of an old man, who had a herpetic eruption situated on the anterior aspect of the upper arm on the right side; this was accompanied with severe itching and a pricking sensation. Eight days after the appearance of the eruption, he found himself unable to raise or extend the arm. There was no pain or swelling in the muscles or joints, and the electric reactions were normal. The herpes and the paralysis both indicated the circumflex and musculo-cutaneous as being the nerves affected. The treatment was electrical, and brought the case to a successful termination.—*British Medical Journal*, September 19, 1885.

PILOCARPINE IN DATURA-POISONING.—DR. LADISLAS ROTH, of Nagy Bajour, Hungary, was called, at 1 P. M., to a little girl, aged 4, in a druggist's shop. She was quite insensible, with widely dilated and insensitive pupils, the face and body being swollen as if dropsical, and covered with a scarlatiniform rash. She was very restless, throwing herself about in all ways, groaning and gnashing her teeth; the pulse was 146, small and weak; the respirations 40, superficial, the temperature 39.5° Cent. (103.1° Fahr.). No urine or stool had been passed since the commencement of the symptoms. The mother said that other children had told her that

the child had eaten two handfuls of sweet ripe stramonium-fruit, and, when she saw her at 11 o'clock, she had seemed ill, and unable to stand on her feet. She had called the Government medical officer, who prescribed a mixture containing two grains and a quarter of tartar emetic. The druggist, however, being of opinion that that would not do any good, took upon himself to give a solution of sulphate of copper instead. In the vomit which the copper had produced a number of berries of datura-stramonium were seen. Dr. Roth, remembering a case of atropine-poisoning he had seen reported by Professor Purjek, which had been cured by pilocarpine given subcutaneously, administered, at 12 o'clock, half a centigramme ($\frac{1}{2}$ th grain) of pilocarpine, in five centigrammes of water, by means of a Pravaz's syringe. No salivation or sweating followed, and no improvement was detected; and, at a quarter to three, a centigramme was given. The red rash and the swelling diminished. At three, another centigramme was given. The child cried, and shortly began to show various signs of improvement. The injections were continued. Up to 5 o'clock, $\frac{1}{4}$ of a grain had been given. At six, the pupils had become almost normal, and the pulse 120, and temperature 103.6° F. She was able to speak quite plainly, and wanted something to eat. All this time, there had been no sweating. At 7 o'clock, as her condition appeared somewhat less satisfactory, half a centigramme more was given, and this brought on both salivation and sweating. She made a rapid recovery. Altogether, six-sevenths of a grain of hydrochlorate of pilocarpine were administered, five of which, the writer considers, were required to neutralize the datura.—*British Medical Journal*, September 19, 1885.

ACTION OF NITRO-GLYCERINE ON NEPHRITIS.—R. B. BURZHINSKI, in *Vratch*, gives the result of his experience with nitro-glycerine in the treatment of nephritis as follows:

1. Nitro-glycerine in small doses diminishes the quantity of urinary albumen passed per diem, and still more markedly the percentage of albumen in the urine.

2. The diurnal quantity of urine is perceptibly increased by nitro-glycerine, this increase persisting some time after the nitro-glycerine has ceased to be given.

3. Gradually increasing doses of nitro-glycerine influence still more decidedly the formation of albumen.

4. I have been unable to determine the influence of nitro-glycerine on the weight of the urine, the weight of the patients, and on the dropsy.

5. With the exception of slight and transient headaches, nitro-glycerine does not give rise to any disagreeable symptoms.—*The Practitioner*, September, 1885.

CÆSAREAN SECTION WITH SUTURE OF THE UTERUS WITHOUT MUSCULAR RESECTION.—VON LEOPOLD, at the conclusion of a report of two additional cases of Cæsarean section with suture of the uterus and without muscular resection, lays down the following rules for operation:

1. Preparations for the operation should be as restricted as possible, but the external and internal genitals should be carefully washed with solution of corrosive

sublimate, 1 : 2000, or with three per cent. carbolic solution.

2. Operate as early as possible at the end of the first stage of labor.

3. Obtain a reliable assistant, who, previous to the operation, must inform himself concerning the operation in all its details.

4. The uterine incision must at first extend only to the movable peritoneum, but will finally be extended to the fundus.

5. After the delivery of the child and before the removal of the placenta, slip the uterus from the abdominal cavity, and,

6. Induce cessation of hemorrhage by compression of the neck of the uterus by an elastic ligature, regulated by the hand.

7. Undermining and resection should only be performed if the serous edges of themselves do not coaptate on account of muscular contraction, and the surfaces of the wound protrude. Preparation for this operation is necessary; and undermining may first be performed, and followed by resection. Both, probably, are always preferably to be avoided.

8. The uterine incision should first be closed with deep silver sutures, avoiding the decidua. The internal margins of the muscular borders will be best coaptated if, previous to the drawing taut of the sutures, the uterus is compressed laterally, as thereby the outer edges gape but the inner come into apposition. The sutures should now be tightened, and the uterine wound is thus closed under the eye of the operator, from within outward. Too firmly drawing the sutures together must be avoided. Superficial sutures of fine silk give the best results. The serosæ are thereby folded, as usually occurs spontaneously; the superficial suture of each serous border in the middle portion of the wound is always best when double, while at the ends a single transfixion is sufficient.

9. After suture of the uterus, the elastic ligature is removed, and the remaining steps of the operation are concluded according to the methods of laparotomy.—*Archiv für Gynakologie*, Bd. xxvi. Hft. 3.

THE MODIFICATION OF THE BILIARY SECRETION IN FEBRILE PROCESSES.—DR. G. PISENTI (*Arch. per le Sci. Mediche*, vol. ix: p. 2), in an experimental study to determine the effects of febrile conditions in modifying the biliary secretion, subjected dogs to intravenous injection of septic material and to confinement in an elevated temperature. By the first procedure, *septic fever* was produced, and as a result of confinement in high temperature, *a fever from retention of heat*.

In both sets of experiments a rise of temperature was noticed, ranging from 2° to 4° C. The results of his experiments are thus recorded:

1. The biliary secretion always diminishes during the existence of fever, whether resulting from septic condition or from retention of heat, and the diminution noted varies from one-half to one-third of the amount secreted under normal conditions.

2. The quantitative variation of the fluid portion of the bile is demonstrated in both forms of fever, and is in relation with the duration and height of the fever, while changes in the elimination of the solid materials vary according to the nature of the febrile process.

In septic fever, the quantity of the solid materials is

diminished in proportion to the decreased velocity of the blood in the portal system. On the contrary, in fever due to the retention of heat, the quantity of solid materials eliminated increases with the rise in temperature in relation with the altered conditions in the portal circulation.

3. In fever, the bile which escapes from fistulæ contains more mucus than normal; in septic fever the quantity is greater than in that due to the retention of heat.

4. In fevers generally the coloring matters of the bile undergo changes and modifications in their chemical constitution, by which the bile becomes black and afterward of a dark green color.

5. The normal condition of the biliary secretion is reëstablished very slowly after septic fever, but with greater rapidity after fever from the retention of heat.

6. The alterations in the biliary secretion during the existence of fever are not due to organic lesions,—as the author has found by microscopic examination of the liver of animals experimented upon,—but are found to be entirely functional.—*Lo Sperimentale*, August, 1885.

THE BRUIT DE GALOP.—M. POTAIN, at the recent meeting of the Congress for the Advancement of Science, advanced a new theory of the bruit de galop, according to which the bruit results from the sudden tension of the ventricular wall subsequent to the entrance of blood into the cardiac ventricles.

In support of his views the annexed facts are brought forward:

1. The bruit is always diastolic.

2. It results from the entrance of the blood; with which it always coincides, and which is always the only active movement produced at this moment.

3. It is not necessarily connected with the auricular systole, and may be produced without relation to it.

4. It appears to occur at the moment when the ventricular wall enters into diastolic tension, and, moreover, it is more accentuated when that wall is more rigid or inextensible, a condition which necessarily increases its intensity.—*Journal de Médecine de Paris*, September 20, 1885.

HYPODERMIC INJECTIONS IN ANTHRAX.—OLAVIDE (*L'Union Médicale*, September 26, 1885) recommends as a hypodermic injection in anthrax:

R.—Acidi carbolici f3j¼.
Alcoholis f3ijss.
Aquæ dest. f3iv.—M.

At the beginning of the disease injection at the base of the tumor should be made with the solution. Pain is diminished, the swelling diminishes, and the fever is diminished and disappears entirely the third day.

By continuing the injections and covering the diseased surface with lint soaked in the same solution, there occurs, according to Olavide, resolution of the anthrax about the eighth day.

ASTRAGALOID OSTEOTOMY IN THE TREATMENT OF FLATFOOT.—PROFESSOR WILLIAM STOKES, in discussing the treatment of flatfoot by astragaloid osteotomy, makes in conclusion the following observations:

1. That the theory of ligamentous relaxation being

the chief factor in the production of flatfoot is erroneous, being in the majority of cases the result and not the cause of that deformity.

2. That elongation of the calcaneo-scapoid ligament should not be mistaken, as it so often is, for relaxation of it.

3. That the altered direction of the sustentaculum tali is a change that could not be directly or indirectly connected with either ligamentous relaxation or muscular paralysis.

4. That the osseous deformation, whether resulting from original malformation, or rickets, or other pathological change in genu valgum—a condition until quite recently believed to depend solely on ligamentous relaxation—furnishes an *à priori* argument in favor of the author's theory.

5. That the treatment of pes planus in cases, at all events, where the deformity is irreducible should be directed mainly to restoring the arch of the foot by operative interference with the misshapen astragalus.

6. That this is feasible without destruction of the medio-tarsal joint.

7. That the evidence in favor of muscular paralysis being an etiological movement in the production of flatfoot is insufficient and unsatisfactory.

8. That deformity of the scaphoid, the result of disease, may also be looked upon as a cause of flatfoot.

9. That the appearances in the specimens noted by Mr. Symington and the author furnish strong proof of the truth of the connection between flatfoot and original osseous malformation.

10. That, after astragaloid osteotomy, it is desirable to keep the foot, during the healing of the wound, in a state of supination, which can be conveniently effected by the application of a Dupuytren's splint, as used in fractured fibula.—*Annals of Surgery*, October, 1885.

THE RESULTS OF COMBINED SPLENECTOMY AND THYROIDECTOMY IN DOGS AND RABBITS.—G. B. UGHETTI and E. DI MATTEI (*Arch. Soc. Med. Bizzozzeri*, vol. ix. p. 2) find, from experimental removal of both spleen and thyroid body in dogs and rabbits, that

1. Total thyroidectomy causes the death of animals in from 4 to 15 days after the operation, with the same phenomena already observed by others.

2. Splenothyroidectomy done at a single operation produces death in dogs in from 4 to 16 days after the operation, with occurrence of the same symptoms observed after total thyroidectomy alone.

3. By thyroidectomy and consecutive splenectomy, at different times and with an interval of from 5 to 9 days, the dogs succumb as before but suffer much more if chloroformed for the consecutive splenectomy.

4. Dogs in normal condition are not affected by transfusion of blood from dogs upon which thyroidectomy has been practised, whether made through the peritoneum, the veins, or directly from the carotid artery into the jugular vein.

5. Dogs from which the thyroid has been removed when subjected to transfusion, even though from dogs upon which thyroidectomy has been performed, live longer than when transfusion is not practised.

6. Of five dogs in which a single lobe of the thyroid was removed, one died after 4 days, a second after 6

days, and no effect whatever was observed in the remainder.

7. Isolation of the two lobes of the thyroid body, is followed by neither local nor general disturbance.

8. Total thyroidectomy in the rabbit is not followed by any disturbance or death.

9. Rabbits survive splenothyroidectomy done at a single operation.

One female thus operated upon became pregnant and brought forth at term healthy offspring with both organs present.—*Lo Sperimentale*, August, 1885.

SPONTANEOUS RUPTURE OF THE STOMACH.—DR. J. CLARKE reports two cases of spontaneous rupture of the stomach, an occurrence so rare as to render it extremely interesting, especially from a medico-legal standpoint. The two cases recorded were instances of rupture of the stomach, and not a mere perforation of the walls of that viscus. The coats of the stomach in one case were atrophied and thin, but in the other were healthy; and in neither case were the coats of the organ, softened or eaten away in irregular patches by the action of the gastric juice. In both cases the stomach was empty at the time of rupture; and in both the gastric juice acted only on the spleen, digesting off its capsule and peritoneal coat, in patches, and thus allowing the escape of blood into the abdominal cavity. Dr. Clarke thinks there can be no doubt that the rupture in both took place before death, and was not due to post mortem softening; the seat of rupture was on the anterior wall. The mucous membrane and peritoneal covering could be traced up to the margin of the rent, and did not present any marked degree of irregularity; and there was an absence of softening, erosion, or rupture on the posterior wall of the stomach.—*The Indian Medical Gazette*, August, 1885.

THE VACCINE FLUID OF M. FERRÁN.—At a recent meeting of the Académie de Médecine de Paris, M. CHANTEMESSE, in his own and M. ROMMO's name, made a report upon the vaccine fluid employed by M. Ferrán. Two samples were examined, the first brought from Spain by M. Rommo; the second sent directly by M. Ferrán. The results of their experiments and investigations are embodied in the appended résumé:

1. The vaccine of M. Ferrán is not a fluid the culture of which is invariable; sometimes it is an impure culture of comma-bacilli; at others it is a liquid containing masses of microorganisms, while the comma-bacillus is almost absent.

2. In various cases the subcutaneous absorption of the so-called vaccine did not protect from the stomachic injection of a pure culture of the comma-bacillus, according to the known methods. Its vaccine power in their experiments is shown to be *nil*.

3. Injected beneath the skin of India-pigs, even in the dose of several cubic centimetres, the vaccine caused no appearance of choleraic phenomena. According to its composition and the dose injected it sometimes produced inflammation, and sometimes was without result. Cultivated separately the different microorganisms therein are discovered to possess different morphological features and pathological properties. In considerable dose some of them occasion death.—*Journal de Médecine de Paris*, September 20, 1885.

THE MEDICAL NEWS.

A WEEKLY JOURNAL
OF MEDICAL SCIENCE.

COMMUNICATIONS are invited from all parts of the world. Original articles contributed exclusively to THE MEDICAL NEWS will be liberally paid for upon publication. When necessary to elucidate the text, illustrations will be furnished without cost to the author. Editor's Address, No. 1004 Walnut St., Philadelphia.

SUBSCRIPTION PRICE, INCLUDING POSTAGE,

PER ANNUM, IN ADVANCE, \$5.00.
SINGLE COPIES, 10 CENTS.

Subscriptions may begin at any date. The safest mode of remittance is by bank check or postal money order, drawn to the order of the undersigned. When neither is accessible, remittances may be made, at the risk of the publishers, by forwarding in registered letters.

Address, LEA BROTHERS & CO.,
Nos. 706 & 708 Sanson Street,
PHILADELPHIA.

SATURDAY, OCTOBER 17, 1885.

RARE NERVOUS SYMPTOMS IN DIPHTHERIA.

ABSENCE of the patellar tendon-reflex after diphtheria has been recorded by several writers, but the observations of BERNHARDT, which appear in a recent number of Virchow's *Archiv*, would seem to indicate that it is not a frequent sequence of this disease. Of twenty-one cases examined during convalescence it was absent in thirteen on both sides, and in one case on one side only. The abolition of the reflex comes on from three to six weeks after the commencement of the attack and is not reestablished for five or six months. It usually occurs without any indications of affection of the nervous system, but the symptoms of post-diphtheritic ataxia may be present, though even when this exists the patellar reflex is not necessarily absent.

UHTHOFF reports a case, in a boy of ten years, who began to have disturbance of vision fifteen days after an attack of diphtheria. There was complete paralysis of accommodation with retention of the pupillary reflex. Four or five weeks later complete external ophthalmoplegia with ptosis made its appearance, and paresis of the legs with ataxia and abolition of the patellar reflex followed the ocular symptoms. At the end of sixteen weeks the boy began to improve, and complete recovery took place in about four months later.

MENDEL has published an analogous case with a careful microscopic examination of the nerve centres. A boy, aged eight years, had, in the early days of convalescence from diphtheria, paralysis of the palate. Six weeks later, almost all the eye muscles on both sides were involved, without any impairment of accommodation or diminution in the field of vision.

There was paralysis of the muscles of the neck, and of the right facial nerve, incoördination of the muscles of the extremities, and absence of the patellar reflex. The sensibility was normal, with the exception of slight hyperæsthesia of the legs. Death took place from paralysis of the respiratory muscles. The autopsy showed arterial and capillary congestion with minute hemorrhages along the roots of the nerves in the entire region from the corpora quadrigemina to the decussation of the pyramids. The nuclei of origin of the nerves were normal. The nerve cords, particularly the oculo-motor, showed interstitial and parenchymatous neuritis in an advanced grade. The changes in this case point conclusively to a peripheral affection of the nerves, and are in accordance with the well-known views of Charcot and Leyden.

The neuritis may be excited in some instances by the local action of the diphtheritic virus. In the case of the velum palati, so often attacked, the branches of the nerves are directly involved; and Mendel refers to an interesting observation of Kiissmaul, in which a diphtheria of the umbilical cord in an infant was followed by paralysis beginning in the abdominal muscles.

Mendel has also seen three cases of post-diphtheritic hemiplegia due, he thinks, to vascular lesions; in all, the paralysis was entirely motor, it involved the face and extremities on the same side, and developed suddenly, without warning, and without loss of consciousness. In one of the cases which terminated fatally, a spot of hemorrhage was found in the region of the lenticular nucleus.

REMOVAL OF THE OVARIES ON ACCOUNT OF UTERINE TUMORS.

THE operation which is generally known as Battey's, consists in the removal of the healthy or only slightly diseased ovaries, to produce a premature menopause. Various indications have been given for this operation, and the number of cases in which it has been performed increases almost daily. By this constantly enlarging experience the value of the operation will be determined, and the cases to which it is legitimately applicable will be decided.

Apart from any danger in the operation, it must always be regarded as a very grave act to remove a woman's ovaries while she is still in the reproductive period of life. Notwithstanding the statements of some writers as to the persistence of sexual desire and pleasure in women whose ovaries have been taken away, this is not the chief point; if woman were created simply as the minister of lust, to receive and give sexual pleasure, there would be great strength in the argument. But she was made to be a mother, to bear a most important part in the continuance and in the increase of the race, and if her ovaries are removed, this chief end of her existence is at once

and forever gone. Just as the late Dr. Gross stated as to making an artificial vagina when the uterus is absent—an operation which he unqualifiedly condemned—you do not by the operation fit a woman to be a wife, but to be a prostitute. So in ablation of the ovaries a woman is denied a wife's true crown, maternity, and may be degraded to a prostitute's condition. We must think that the argument as to the continuance of her sexual gratification, used by some of the advocates of the operation, is an appeal to the lower elements of human nature, and may be cast aside. Questions relating to this gratification are rarely proper or necessary topics for professional conversation, and we imagine many women would shrink from answering them, if not actually resenting their presentation.

Still further, we believe that an unmarried girl who has had her ovaries removed has no right to enter marriage—her necessary sterility debars her from it, and this she ought to be told before her consent to the operation is given.

But that the ovaries may and ought to be removed for certain diseases cannot be doubted. The interests of the individual become paramount, and those of the race are given no weight; her life must be saved, even at the sacrifice of all possibility of her having offspring. Now it is in the discrimination as to these cases that not only scientific knowledge and professional experience, but also ethical considerations enter: the removal of the normal ovaries is always a question in morals, as well as in medicine, and cannot be evaded in either relation without evil results.

One of the applications of Battey's operation has been considered at some length by DR. NOTTA in a recent number of *L'Union Médicale*. It concerns hemorrhagic fibro-myomata of the uterus. Notta goes so far as to suggest that it is probable these growths give the sole indication for the operation. His views are in direct opposition to those expressed by DR. E. SCHWARTZ, in the recently issued thirty-seventh volume of the *Nouveau Dictionnaire de Médecine et de Chirurgie Pratiques*. The latter states:

"Notwithstanding some successes from this intervention, we think it should not be resorted to unless ablation of the uterus is absolutely impracticable and medical treatment insufficient, for when one makes a patient run the risk of laparotomy, it is necessary at least to give her decided chances of cure; now hysterectomy appears in this connection the sole rational operation, and if in some cases Hegar's operation has acted favorably, more frequently still it has not attained its end."

Of course removal of the ovaries, or of the uterus, ought not to be done until medical means have been ineffectually tried, but certainly the latter operation

carries greater risk to life than does the former, whether called by the name of Battey, or of Hegar, and therefore should be rejected if anything like as good results can be secured by the other.

Notta gives the following conditions as indicating removal of the ovaries: The uterine tumor of mean, especially of small size, and directly inaccessible; causing incoercible metrorrhagia, which places the patient's life in danger, she being still young, and medical means for the cure of the hemorrhage having failed.

He quotes from a recent thesis of Tissier which includes 171 cases of castration in women suffering from uterine fibro-myomata, to the effect that there were 25 deaths, or a mortality of 14.16 per cent. In 135 of the remaining 146 the desired end was attained; that is, the uterine hemorrhage ceased, and the menopause occurred.

These statistics probably present the operation in its most favorable light, but even those of Wiedow do not justify resort to it unless other methods of treatment have failed. It sometimes happens that a tumor which has caused grave hemorrhages, becomes pedunculated in the uterine cavity, and its removal through the vagina can be done with little risk, and the integrity of the woman's sexual organs is kept. Patient waiting, palliation, and temporizing are required; the result is more slowly attained, a brilliant successful laparotomy is not proclaimed in societies and journals, but the ultimate condition of the patient is every way preferable, for she has undergone no mutilation, and the possibility of maternity remains to her. On the other hand, the tumor may become pedunculated in the peritoneal cavity, the hemorrhage ceasing with this change in position of the growth.

We are persuaded that in some cases of uterine fibroids causing metrorrhagia, a masterly inactivity, so far as surgical means are concerned, or simply an armed expectation, is the wiser plan. If one knows how to arm himself with patience, and to inspire the sufferer with confidence, he may find that the great majority of his cases of uterine fibroids will get on well without surgical treatment. Thorburn regarded 10 per cent. as a most liberal estimate of those cases that require the aid of the operating surgeon.

DURANDE'S REMEDY FOR GALL-STONES.

It is very generally acknowledged that the idea of dissolving calculi within the gall-bladder by the administration of medicine, is a therapeutic delusion; yet it is deeply implanted in the professional mind, and there are probably few practitioners who have not used lithontriptics of one kind or another. Of such remedies the mixture of sulphuric ether (three parts) and turpentine (two parts) as recommended by Durande, in 1774, has long been a favorite one.

Certainly it has stood the test of time, and held its ground while systems of therapeutics have had their day and ceased to be, and has made the name of the learned Professor of Dijon to live, while his numerous chemical and botanical researches have long been consigned to oblivion.

Results described as brilliant have been reported by a long series of physicians of all countries, from Haller and Sömmernig, in the last century, to the most recent authors in our systems and dictionaries of medicine. The mode of action is unknown; it is given empirically, but those who have faith in its efficacy hold that a positive solution of the calculi takes place under its use; others think that it is beneficial only in relieving the colic and permitting the stones to pass more easily, and the title of Durande's original paper leads one to infer that this was his view. Stimulated by the cure of a case at Professor Botkin's clinic, by the use of this remedy after a prolonged trial of alkalies, LEWASCHEW (*Virchow's Archiv*, cii, 3) has made a very careful experimental study of the action of the sulphuric ether and turpentine, alone and combined, on the biliary secretion. By means of carefully devised fistulæ, through which the bile could be collected and estimated, the effect of the remedies when introduced into the stomach could be ascertained. The experiments very clearly show that, singly or combined, the ingredients of Durande's mixture powerfully influence the secretion of the liver, increasing it in quantity, and diminishing the consistence. There does not appear to be much difference in the intensity of the action of the separate ingredients, but the turpentine acts more slowly. The combination, tried in various proportions, did not have any greater influence than when the drugs were used singly. The mixture of ether and castor oil, as recommended by Duparcque, did not induce a more active secretion than the ether alone. The effect of the remedy in man may be said to depend, not on any power of solution of the calculi, but on its great cholagogue effect, and the furthering of the passage of the stones through the duct. No doubt, too, by diminishing the consistence of the secretion it may prevent the development of other concretions. The ether was found to have a decidedly more intense action on the secretion than the bicarbonate of sodium; on the other hand, in comparison with the salicylate of sodium, the action of Durande's remedy is slight and transitory, and the author recommends it strongly as the most effective agent in augmenting the quantity and reducing the consistency of the bile. In his former investigations on the action of alkalies on the composition of the bile, he found the effect much intensified by combining them with large quantities of water, and, no doubt, we here have the secret of the success of the cure of cholelithiasis by Vichy and other mineral waters.

MEDICINE IN CHINA.

THE second annual report (1884) of the Soochow Hospital, which is under the control of Methodist Episcopal missionaries, shows a very gratifying state of affairs and real progress in the work of introducing Western medicine into China. Everywhere, throughout the East, the advantage of combining the medical and theological professions is so evident, and the demand for medical missionaries has become so urgent, that many earnest men, to be better equipped for the work, have temporarily given up their proselytizing labors to return to Europe or this country to study medicine.

At several stations hospitals have been established at which the natives can receive treatment, and medical schools at which native pupils can follow a regular course of instruction. The Soochow Medical School, established in 1883, has eleven native students, all, save one, Christians, and the course which is laid down seems very complete, comprising a five years curriculum, with a thorough preliminary examination in Chinese classics, and a nine months' session. The lectures are in the native language, and through the labors of Osgood, Kerr and others, the students have an ample supply of text-books in Chinese.

At the hospital nearly 12,000 patients were under treatment during the year, the great majority, of course, in the dispensary. Some interesting facts may be gleaned from the classified list of diseases treated. More than a third of the cases are under the three divisions of intermittent fever, diseases of the eye, and diseases of the skin. A remarkable feature is the prevalence of quartan ague. Of the cases of intermittent, 1391 in number, 1253 were of this type, and in nearly all the paroxysm occurred in the afterpart of the day. Another singular fact is that foreigners, living for years in the same locality and exposed to the same source of poison, will almost invariably have the tertian form, while their Chinese servants or neighbors have their chills after an interval of two days. The absence of severe remittent and congestive types of malarial poisoning is somewhat remarkable. There were no cases of the *filaria hominis sanguinis*, and no instances of the distoma of the bronchial tubes, which has been shown to be a fruitful source of hæmoptysis in the East. Two hundred cases of the opium habit were under treatment, and it is proposed to put up a separate opium refuge so soon as funds are forthcoming.

The financial statement shows how much can be done in practical charity with very little money. The record of attendance at chapel alone reminds us that this is a report from a missionary hospital, and it reminds us too of the labor and toil which these zealous members of the profession gladly undertake for the sake of a higher object. The mental con-

dition of sick persons is mobile and favorable to change, a psychological fact which has been taken advantage of by theologians in all ages. When the blood creeps and the nerves prick and tingle, when the bones and flesh are touched, the mind is unstable and easily moved, and the missionaries find that in the process of repairing the "frail earthen vessels," they have the best opportunities for the work to which their lives are devoted. In the modern crusade the stethoscope has replaced the sword.

No notice of the state of medicine in China would be complete without a reference, however brief to the splendid work which the medical officers of the Imperial Customs have been and are doing to advance our knowledge of the diseases of the East. We could wish the *Imperial Customs Medical Reports* a much wider circulation than it seems to have, in this country at least, for scattered through its issues are many important contributions of general interest. Working in an unknown field, they have found many things new and strange, particularly among parasitic diseases. The researches of Patrick Manson on the filaria disease have been of extraordinary interest to biologists and physicians, and within the past few years we have in succession the announcement of the discovery of two new parasitic affections due to the distomes or flukes, helminths which have heretofore played a minor rôle in human pathology. Parasitic hæmoptysis appears endemic in certain regions of China and Japan, and is due to the presence of the distoma Ringeri in the bronchial tubes and lung tissue. In some districts a considerable percentage of the people are affected with severe liver disease, due to the occurrence in the bile passages of another fluke, distoma perniciosum, which produces a disease similar to the "rot" in sheep, caused by the common liver fluke. The last numbers of the *Reports* contain an interesting description of the disease by Dr. Wallace Taylor. A second species of distome has been found in the liver of man in Japan and China, and as it does not appear to produce a severe disease, it has been called *D. innocuum*. Bætz has lately affirmed that this species is identical with the *D. perniciosum*, but in the specimens which we had an opportunity of examining there were sufficient differences to indicate that they are distinct species, or, at any rate, well-marked varieties.

In the beginning of the Congress controversy extreme solicitude was expressed by some members of the Association for the assertion of its supreme authority in everything pertaining to the organization of the Washington meeting, and its *Journal* devoted many pages to advocating this point. Now, however, that the new Executive Committee

has proclaimed its independence of the parent Committee and of the Association, by formally declaring that its acts are "not subject to revision, amendment, or alteration by either the Committee of Arrangements or the American Medical Association," the *Journal* has not a word to say against their usurpation of power, or about the propriety now of maintaining the authority of the Association in the premises. It does not point out how the *new* Committee have laid themselves open to "the charge of having ignored the body from which its existence and all its powers had been derived," or how they "coolly turn the Association into a 'football' and contemptuously kick it out of their way." It no longer talks about members making "a bold attempt to use the National character and prestige of the American Medical Association as a 'decoy duck' to obtain their own appointment to office." The authority of the Association is openly defied by its own Committee, and its *Journal* suddenly becomes silent on the subject.

REVIEWS.

DISEASES OF THE TONGUE. By HENRY T. BUTLIN, F.R.C.S., Assistant Surgeon and Demonstrator of Practical Surgery and Diseases of the Larynx, St. Bartholomew's Hospital; lately Erasmus Wilson Professor of Pathology at the Royal College of Surgeons. Illustrated by chromo-lithographs and engravings. Small 8vo. pp. 445. Philadelphia: Lea Brothers & Co., 1885.

THIS book, the latest issue of the "Clinical Manuals for Practitioners and Students of Medicine," is a model of its kind. Since Fairlie Clarke's work appeared in 1873, no extended treatise upon diseases of the tongue has been published in the English language, and Clarke's book is now in many respects far behind the times. This treatise is, then, specially welcome, all the more so that the text is really *illustrated* by a sufficient number of admirably executed colored plates, and not rendered more confusing by absurdly colored daubs.

The work has been written by one whose opportunities have peculiarly fitted him for the task, since he teaches not only from a clinical but from a pathological standpoint. While we see very much to praise, there are yet a number of points which seem to us open to criticism. Lack of condensation and needless repetition might have been avoided in some sections, and some omissions are regrettable, such as the overlooking of the fact that certain bursæ, when enlarged, may simulate tumors of the tongue. Still these are but minor blemishes, and we heartily commend the book to our readers. We wish that all general practitioners would read at least two portions, viz., that which treats of mucous patches, etc., of the tongue, wherein it is shown that constitutional treatment, without local, is too often of little value; and the following: "If there be one thing more harmful than another in the treatment of simple indolent sores of the tongue in persons over thirty years of age, it is the application of a strong caustic." Either let the disease alone, or remove it with the knife or

actual or galvanic cautery. Similar remarks are applicable to the treatment of other tongue affections, notably warty growths.

Two other interesting points and we have done, for it would be impossible to do anything like justice to this little book without a many-paged review. Mr. Butlin maintains that in microscopic examinations of scrapings of carcinomatous ulcers, among non-important substances, many irregularly shaped, multinucleated, malformed, epithelial cells, together with "cell-nests," will be found; while in the examination of scrapings of more than one hundred tongues, either healthy or variously diseased, but not carcinomatous, nothing that could be mistaken for a cell-nest was to be observed. He does not, so it seems to us, unduly magnify the importance of such microscopic examinations, to the exclusion of a careful consideration of all the general characters of the disease, but merely says that in a number of cases he or his colleagues have been by such means enabled to make a definite diagnosis in doubtful cases.

The second and last point which our space will enable us to mention is the peculiar view advanced by Mr. Butlin, that "fur" on the tongue, either in health or disease, is essentially due to the multiplication of micro-organisms, chiefly micrococci and bacteria subtilis. His arguments in support of his views could only be stated by means of long quotations or paraphrases, so that we must refer the reader to the original.

The author is occasionally a little slovenly, and consequently obscure, in his style, and indulges in certain inelegancies which mar his work in critical eyes; but we again repeat that the book is a good one, and a real addition to our surgical literature.

SOCIETY PROCEEDINGS.

THE PHILADELPHIA PATHOLOGICAL SOCIETY.

Stated Meeting, September 24, 1885.

THE PRESIDENT, E. O. SHAKESPEARE, M.D.,
IN THE CHAIR.

DR. WILLIAM OSLER presented specimens of

TÆNIA ECHINOCOCCUS.

This rare parasite was reared experimentally by feeding a dog with hydatids from the liver of a pig. The animal was killed about seven weeks after the feeding, when the small intestine was found to contain many hundreds of the mature tapeworms. The portion of bowel exhibited had many adherent to the mucous membrane. From the small size of the worms, only a few lines in length, they are very apt to be overlooked. Cobbold states that the only specimens procured in England have been experimentally reared. Dr. Leidy has never met the adult worm in this country. That it must occur here in the dog is very evident, from the frequency with which echinococcus cysts (the larvæ) are met with in the hog and other animals.

CYSTICERCUS CELLULOSUS.

DR. OSLER exhibited the heart, brain, and a portion of the flesh of a pig containing the "measles," as the larvæ of the tænia solium are called. Both organs

were thickly studded with the cysts, which were also very numerous throughout the muscular system. The animal was fat, and seemed to suffer very little inconvenience. Attention was called to the cysts beneath the tongue, and to the possibility of telling whether an animal was measled by an examination of this part during life. Microscopic slides of the parasites were shown, and a slide of a cysticercus, with a very large caudal vesicle, from the omentum, in which situation they may grow to the size of a walnut.

DISTOMA HEPATICUM; EFFECTS ON THE LIVER.

DR. OSLER also showed the liver of an ox with enormous enlargement of the bile vessels and calcification of their walls, due to the chronic inflammation excited by the presence of the flukes. The main ducts were thicker than the thumb, and even the smaller tubes were as hard as the stem of a clay pipe. The liver substance was wasted, but not cirrhotic. In spite of this extensive disease, the animal was well nourished. Specimens of the flukes in spirit and mounted were also shown.

DR. WILLIAM PEPPER presented before the Society the specimens of

TÆNIA FLAVO-PUNCTATA,

described by Prof. Leidy, in the *American Journal of the Medical Sciences*, for July, 1884. This species has never but once before been seen and recognized, and then by Weinland, of Boston, in 1858. Both specimens were expelled from young children, and averaged twelve inches in length.

DR. PEPPER also presented the head and neck of a specimen of

TÆNIA MEDIO-CANELATA.

It occurred in a young man. A course of starving, followed by castor oil and pelletierine, removed a portion of the worm; afterward a repetition of the starving process without the castor oil, but with the alkaloid, brought away the entire worm dead.

Dr. Pepper said he was particularly interested in this series; it spoke forcibly of the necessity of studying comparative pathology. The specimens were very perfect, and more instructive than more highly organized species. In practice he had found the *T. medio-canelata* as difficult to expel as the *tænia solium*. The exhibition of the small variety, the *flavo-punctata*, taught the necessity of careful examination of the stools.

DR. DE SCHWEINITZ exhibited the kidneys, ureters, and bladder from a man who died after the operation of

LITHOLAPAXY.

The patient, æt. 73, had for two years previous to the operation suffered with straining during the act of micturition, and other symptoms of hypertrophy of the prostate gland and vesical calculus. The urine contained albumen, pus, epithelium, and granular casts, and had a specific gravity of 1018. The patient's habits were intemperate. The operation of litholapaxy was performed, marked difficulty having been experienced in the introduction of the instruments.

After the operation the patient exhibited great restlessness, precordial pain, and a rapid, feeble pulse. Later he became comatose, and died twenty hours after the operation, the immediate cause of death being, ap-

parently, the formation of a heart-clot. The *post-mortem* examination was made about ten hours after death:

Body well made; nothing of note anteriorly; the usual ecchymoses posteriorly. *Thorax*: Old pleuritic adhesions on the right side; left side free. Lungs crepitant with slight posterior congestion. Heart surrounded with fat; muscular fibres flabby; valves normal; firm "chicken-fat" clot in the right ventricle. *Abdomen*: Position of viscera usual. Marked deposits of fat in the omentum. Liver slightly enlarged, soft, but otherwise normal. Both kidneys granular and containing cysts. Bladder thickened and showing two spots of ecchymoses on the mucous surface. Prostate enlarged; other organs normal. Brain and membranes not examined.

DR. TYSON thought this case added one more to the list showing the impropriety of crushing for stone when kidney disease is present. He did not know why, but under such circumstances the cutting operation is more suitable. Dr. Tyson cited the case of Louis Napoleon as an instance of the danger of crushing in the presence of kidney disease. Dr. Tyson said, in answer to a question of Dr. Barton's regarding the kidneys, that they were contracted, though not markedly so, as there was good secreting structure left. The cysts were part of the pathological anatomy of granular kidney. He believed the cause of death to be uræmia.

DR. DE SCHWEINITZ said that the urethra was not examined, and agreed with Dr. Tyson that the cause of death was uræmia. This was the more probable because an officious attendant, against orders, had administered rather full doses of morphia.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, October 1, 1885.

THE PRESIDENT, ABRAHAM JACOB, M.D.,
IN THE CHAIR.

DR. R. VAN SANTVOORD read a paper on

OBSCURE CASES OF WEAK HEART.

Having alluded to some of the numerous causes of weakness of the heart structure without valvular disease, very prominent among which is typhoid fever, he stated that in many instances a positive diagnosis can only be made after a very careful and thorough investigation of the case.

The first case which he narrated was that of a strong and fresh-looking man, 42 years of age, who had the appearance of robust health. His occupation was that of a drygoods salesman, and except that he took an occasional drink with a customer and ordinarily ate his meals too rapidly, his habits were good. He suffered from drowsiness, which would often come on during the day, and from frequent headache; while his mind was apt to be forgetful. He was also somewhat short of breath in going upstairs, and there was slight disturbance of digestion. The heart sounds (especially the first sound) were rather weak, and there was a distinct reduplication of the second. There was no valvular trouble, and the sphygmographic tracing was of no special significance.

He was placed on ten minim doses, three times a

day, of tincture of digitalis and of tincture of nuxvomica; the latter being added on account of the digestive trouble. At the end of two weeks the heart sounds were louder, but the general health was not improved. The remedies at first prescribed were then substituted with caffeine and strychnia, and under the use of these last he rapidly recovered. Afterwards, when he felt the drowsiness or headache coming on, a few doses of caffeine soon dispelled the trouble.

The second case was that of a stockbroker, 38 years of age, who came of a gouty family, and had had several attacks of gout himself. He had been much harassed by business anxieties, and for the past four years had been in the habit of indulging very freely in the use of spirits. He was prematurely gray, looking much older than he really was, and altogether exhibited a very haggard and careworn appearance. He complained of shortness of breath in going upstairs, and it was ascertained that he had had some albumen in his urine, with occasional puffiness about the ankles, especially when he drank brandy. He was in the habit of taking from twelve to fourteen drinks of whiskey a day, and eating but one meal during the twenty-four hours. When examined, he was found to be suffering considerably from dyspnoea and wheezing. The first sound of the heart was weak, and the second hard and metallic. The urine was slightly albuminous, and of a specific gravity of 1024. One fatty cast was found.

There was great improvement in his case when he stopped drinking whiskey; but when he began to go about again after resting for a time, the dyspnoea returned. He was then ordered ten minims of tincture of digitalis three times a day, together with appropriate tonics, and in two days he was able to sleep flat on his back throughout the night. At the end of six months he had gained measurably in health and strength, though a small amount of albumen was still detected in the urine by means of the mercuric iodide test, and there was also found a number of hyaline cysts. He had previously been rejected by an examiner for a life insurance company on account of the quickness of his pulse. The cardiac disturbance was unquestionably the predominant trouble in the case, and the existence of grave disease of the kidneys was considered improbable on account of the slight and varying amount of albumen in the urine, the normal quantity of the latter, and other circumstances that were noted. The sphygmogram of the patient was exhibited.

The third case was that of a gentleman 54 years of age, who had always been addicted to athletic sports, and had constantly enjoyed good health with the exception of constipation. For a long time he had been obliged to get up in the night to urinate. He now suffered from headache and drowsiness, and was thin, sallow, and anxious looking. There was found to be considerable dilatation of the left ventricle, and also a faint systolic murmur. The cardiac sounds were weak, especially the first sound, and the urine was albuminous. He sought medical advice on account of an intense pain in the vertex, and insomnia. Bicarbonate of soda and gentian were first prescribed, on the supposition that the headache was due to gastric derangement, but no relief ensued. The patient was then put upon tincture of the chloride of iron with digitalis, and at once there was marked improvement in his condition. From the

enlargement of the heart and the great quantity of urine passed, together with the amount of albumen found in the urine, it was inferred that the condition present was one of granular contracted kidney with resulting heart weakness. The sphygmographic tracing of the case was then shown.

After the patient went to the South for some months. He held his own for a year, and at the end of that time it was found that there was no albumen in the urine, which was of a specific gravity of 1015; the quantity passed in twenty-four hours being seventy ounces. Hence, it was concluded that the polyuria was due to some other cause than granular contracted kidney, and probably of urethral birth, as it was ascertained that the patient had a stricture, which he had contracted thirty years before in the ordinary way. The cardiac feature in this case, therefore, seemed to be of an independent nature.

The fourth and last case narrated was one in which the symptoms were so striking that the trouble could hardly be called obscure. The patient was a boy of fourteen, who had recently recovered from the measles, and he was found to have a loud blowing systolic murmur, with marked venous hum. There was cardiac dilatation present, such as is apt to occur in long-standing anæmia; and the patient's sphygmogram showed a very considerable degree of arterial tension.

Dr. Van Santvoord then passed in review the group of cases described, and made a number of observations in connection with them. As to reduplication of the sounds of the heart, he said that reduplication of either one or the other of them was present in three out of the four patients. He referred to the various hypotheses which had been suggested to account for this phenomenon of reduplication, and expressed his agreement with Bramwell in the opinion that it was probably due to asynchronous action of the ventricles. In the third case there was marked dilatation of one ventricle, and it was not difficult to see how, under the circumstances, such asynchronous action was likely to occur. Apart from speculation, persistent reduplication of the first sound of the heart had been repeatedly noted in grave lesions of the cardiac tissue. Weakness of the first sound of the heart was found in three of the cases. In the second case the second sound was loud, and in the third weak, as the ventricles contracted more gradually in this instance.

He next made some comparisons of the action of digitalis and caffeine on the heart. The latter he had found to slow the action and increase the amplitude and tension of the pulse. It seemed probable that it had a slighter influence upon the vaso-motor apparatus than digitalis, and, at all events, the fact remained that caffeine is sometimes efficient in cases in which digitalis fails to act satisfactorily. He believed it to be a better and safer agent than digitalis in acute diseases where there is cardiac weakness. An eminent French authority had advised that it should be pushed until two grammes were taken daily.

DR. JOHN C. PETERS referred to a case still under observation, of a gentleman over sixty years of age, who had always been careful in his habits, and apparently enjoyed perfect health, though he had some reason to suppose that his system was not sufficiently well nourished. He was taken with acute pain in the epi-

gastrium, and when called to see him, Dr. Peters was astonished at the extraordinary weakness of the pulse and failure of the heart which he found. There was at first slight congestion of both lungs, which was followed by bronchitis and some pulmonary oedema; but the temperature was now above 102° F. Dilatation of the right ventricle, with extreme dyspnoea, rapidly developed, and the patient for a considerable time was in a very precarious condition. Since then he has greatly improved so that he is now able to walk a mile; though the heart still remains weak. He had been treated with the ordinary remedies, and in regard to the use of nux vomica, Dr. Peters remarked that it often seems to act more efficiently than digitalis. Like other observers, he had frequently noticed weakness of the heart in connection with pneumonia, and he had formerly believed this to be due to the formation of a clot in the right side of the heart.

DR. LEONARD WEBER said that he had observed no effect from caffeine in cases of dilatation in connection with probable fatty degeneration of the cardiac tissue. He had, however, had good results from the action of digitalis; he had never used the tincture. The infusion, if obtained from perfectly reliable sources, is in every way preferable; but the best preparation of all is undoubtedly Squibb's fluid extract. In delayed recovery of the heart, after acute diseases, he had found caffeine very efficient, and the preparation of it which he is in the habit of using is the hydrobromate. This is generally employed in connection with appropriate tonic remedies. In conclusion, Dr. Weber spoke of the kind of cardiac weakness met with in men of over forty years of age, and weighing more than 250 pounds, where urgent dyspnoea arises from the deposit of layers of fat between the muscular fasciculi of the heart. The successful treatment of such cases is found to consist in the diminution of the amount of liquid taken, the regulation of the food for the purpose of reducing fat, and the employment of as much exercise (principally walking) as can be well borne.

DR. E. DARWIN HUDSON remarked that affections of the heart are not a complicated matter. Whatever might be the characteristics of the difficulty attracting attention, he thought that the experienced physician will at first apply all the tests for the detection of the presence of organic cardiac trouble. If after a thorough examination it is found that there are no evidences of organic disease, he should next investigate the condition of the various viscera in turn, commencing with the kidneys, and then passing on to the liver, stomach, and other organs. A very large proportion of the cases of temporary cardiac disturbance are undoubtedly produced by digestive troubles and perversion of assimilation. Especially have these a marked effect in lowering the pulse; so that if a patient comes to us with a pulse of 40, or perhaps only 32, it can be pretty safely predicted that a cholagogue cathartic will promptly bring it up to the normal standard. If, however, no cause for the cardiac trouble can be found in any of the other organs, we should conclude that it is probably due to a derangement of the ganglionic action of the heart itself, from some defect in the blood supply, and for this condition such remedies as digitalis, caffeine, and convallaria are appropriate.

DR. JOHN P. GARRISH called attention to the impor-

tance of the prevention of such diseases as constituted the present subject of discussion. The use of tobacco, he thought, is responsible for a very large number of these cases of cardiac weakness. In addition to guarding against the excessive use of this, it is also necessary that the diet should be of proper character (the food being highly nutritious, but not stimulating), and that changes of temperature should be carefully provided against, especially by the wearing of flannel. At the same time the individual should avoid excitement. As to the remedies that are of most service in weak heart, he had obtained very satisfactory results indeed from the combination of tincture of digitalis with tincture of stramonium, as suggested to him by the late Dr. Valentine Mott.

DR. ANDREW H. SMITH said in regard to the use of digitalis, that it performs two distinct functions. In the first place, it affects the cardiac action; and, secondly, when given in small doses, it affects the cardiac nutrition.

DR. FRUITNIGHT stated that some time since he had resorted with success to the use of tincture of the night-blooming cereus in a case of apoplexy followed by softening, in which no effect upon the cardiac weakness present was produced by either digitalis or convallaria. Since then he has employed it repeatedly, and has always found it efficient. The dose is from three to ten minims.

DR. VAN SANTVOORD closed the discussion, and in the course of his remarks he spoke of the case which Dr. Peters had described as being one of great interest and instruction. It seemed to him probable that in this instance the cardiac weakness had existed for a long time, but it was only when the acute attack spoken of came on that the heart proved inadequate for its work. Under ordinary circumstances it was competent to meet the demands made upon it, but it was not able to stand the extra strain thus imposed upon it. Dr. Hudson had pointed out very clearly in his remarks the manner in which these cases should be studied; but he had reason to believe that the difficulty is not recognized as it should be by the mass of general practitioners, and it was on this account that he had prepared his paper.

NEW INVENTIONS.

SOME ADDITIONS TO THE OPHTHALMOSCOPE.¹

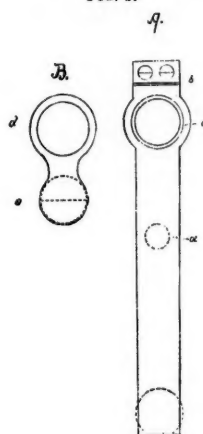
BY B. ALEX. RANDALL, A.M., M.D.,

OPHTHALMIC AND AURAL SURGEON TO THE EPISCOPAL AND THE CHILDREN'S HOSPITALS, PHILADELPHIA.

Cylindrical Lenses. Anyone who makes much use of the ophthalmoscope not infrequently meets cases where cylinder glasses in the ophthalmoscope would be of service. Of course, the desired lens can be taken from the test-set (if at hand) and placed behind the mirror, and some instruments, like that of Noyes, are fitted with a spring-catch to hold it there; yet such an arrangement is but bungling at the best, and the mounting of the Rekoss disk is demanded for these as well as for the spherical lenses. The adjustment for the direction of

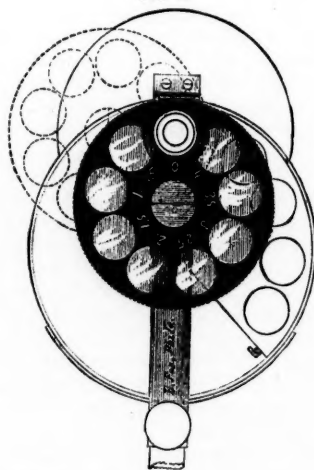
the cylinder axes made use of by Parent in his earlier ophthalmoscope seems the most satisfactory, and has been adopted with little modification in the arrangement here set forth. That such an arrangement has not been well received heretofore, probably depended more upon the other qualities of the instrument of which it formed a part; and the writer's cardinal principle of construction has been that the addition should be made applicable to the ophthalmoscope of Loring with little or no change in the size, weight, or balance of that unequalled instrument. A description will render easy the understanding of its working and its mode of adjustment to the new form of the Loring ophthalmoscope, for which it is more especially designed.

FIG. 1.



The solid covering quadrant which bears the pivot for the Rekoss disks of the original instrument is re-

FIG. 2.



placed by a piece of metal of the form figured at A, bearing the pivot (a) as before, and extending up to be fastened by its shoulder (b) to the body-plate of the

¹ Both additions are constructed by E. Fox, Optician, Seventeenth and Chestnut Streets.

instrument above the lenses. Concentric with the sight-hole of the ophthalmoscope, this is widened and supports a short tube (*c*). Moving upon this tube by a collar fitting *d*, is a short arm (*B*), having at its other end the pivot (*e*) on which turns the disk of cylindrical glasses. This disk (Fig. 2) contains nine openings—one empty, the rest holding *concave* cylindrical lenses in the following order: 0.5, 1, 1.5, 2, 2.5, 3, 3.5, and 4 dioptres. The axis of each lens is at right angles to the radius of the disk passing through it, or, what amounts to the same for the lens at the opening, at right angles to the line of the arm on which the disk is carried. When, therefore, this arm is directed downwards, as in the cut, the cylinder-axes are horizontal as the glasses come into position at the sight-hole of the instrument; and, as the axes of concave cylinders are generally required at or near the horizontal, this is the position which the disk will most frequently occupy in use. Combination with the underlying convex spherical lenses will give the equivalent of any *convex* cylinder desired, either alone, or in combination with a spherical; while, of course, any concave spherical can be added to any cylinder—*e. g.*, —1 cyl. axis $180^\circ \odot + 1$ sph. = +1 cyl. axis 90° ; —1.5 cyl. axis $180^\circ \odot + 3$ sph. = +1.5 sph. $\odot + 1.5$ cyl. axis 90° ; —3 cyl. axis $180^\circ \odot + 1.5$ sph. = +1.5 cyl. axis $90^\circ \odot - 1.5$ cyl. axis 180° ; etc.

The arm bearing the disk of cylinders can be rotated to any extent desired, and the axis of the cylinder at the sight-hole thus turned to any given direction (*e. g.*, to be vertical when the disk is in the position indicated by the dotted lines), the disk revolving equally well in all positions and furnishing the cylinder of the strength required. A spring-stop serves, as with the disk of sphericals, to centre each lens accurately before the opening. The large head of the screw (*e*) which forms the pivot for the cylinder-disk, is so placed that its cleft marks the direction of the axis of the cylinder which is at the sight-hole.

The maximum addition to the thickness of the instrument due to the new disk is about 2 millimeters (7.75:10); the addition to the weight, 3 grammes (48.6:51.8); figures which can probably be reduced without sacrifice of either rigidity or durability; the change in its centre of gravity and balance is hardly appreciable. The modification of the original instrument is, therefore, very slight; but one or two drawbacks should, in fairness, be pointed out. The main disk of the instrument is wholly untrammelled in its working; but the supplemental quadrant (indicated in outlines in the cut) is somewhat affected. It loses its covering quadrant and the questionable benefit of its protection; and the pin projecting from its surface, as now made, to facilitate its movement, cannot pass the sight-hole of the instrument—indeed, it engages the new adjustment before the 0.5 lens, which is adjacent to it, comes into position at the opening. This is easily met by a readjustment of the pin, as shown in the drawing, and is completely avoided in the new arrangement of these lenses which the writer has in contemplation. Without change, it proves no actual inconvenience in working to those who, like the writer, make much use of the +0.5 lens, but little or none of the —0.5. More important to one whose use of the instrument has not yet given him a sort of instinctive knowledge of what

lens he is using, the numbering of the lenses is somewhat hidden, and a rearrangement of these figures would be necessary to show at first glance what lens or lenses are at the sight-hole. To those for whom the addition is especially designed, ophthalmoscopists who have and know the Loring instrument and wish to add to its conveniences, these drawbacks will not be great. Those who have not yet learned the instrument and given it the warm appreciation it deserves, may find certain advantages in a more modified form which the writer will bring forward as soon as actual work shall have confirmed the value of the theoretical improvements which it embodies. The cylindrical disk can be made detachable, and laid aside when not desired; but it would be at some sacrifice of lightness, strength, and smoothness of working.

An "Artist's Attachment." The difficulties of sketching the appearances of the eyeground are considerably increased, and the slowness of accurate portrayal largely augmented, by the need of laying down the ophthalmoscope in order to give both hands to the drawing. "Artists' ophthalmoscopes" carried upon a brow-band have been designed to meet this, and are doubtless valuable; but either their simplicity limits their usefulness from the small number of lenses at command, or else their cost narrows their use. In drawing, too, more than at other times, astigmatism is apt to be much in the way, and demands correction by cylindrical lenses—in the instrument, if possible. The ideal means of meeting all or the most of the difficulties is so to arrange that any ophthalmoscope which is at hand, however complex, may be employed, and yet both hands be left free; and the simpler and less expensive the means to this end the better. Such a means is afforded by a wooden "handle" to be held in the mouth,¹ of oval section, about six centimeters in length by one centimeter in thickness, covered by a bit of rubber tubing.

FIG. 3.



This has at one end (with or without the "goose-neck" represented in the cut) a ball of brass through which slides the short cylinder into which, in lieu of the ordinary handle, the ophthalmoscope is screwed. Most ophthalmoscopes (Loring, Knapp, Gowers, etc.) unscrew at about seven centimeters below the sight-hole, a distance closely approximating the average difference of level of the eye and the mouth. The exact adjustment for any instrument and observer is readily given by the sliding of the cylinder through the ball or by the bend given to the "goose-neck." The amount of control over the instrument which can be conveniently exercised by the mouth, will probably surprise those who employ this simple attachment.

¹ A somewhat similar arrangement is used by Prof. Politzer for his ear-mirror.

CORRESPONDENCE.

TRAINING SCHOOL FOR NURSES.

To the Editor of THE MEDICAL NEWS.

SIR: I take pleasure in sending you the accompanying statistical table regarding the practical working of training schools for nurses.

convinced that these are entirely practicable and efficient.

Hoping the table may prove of value to your readers, I remain

Very truly yours,

WALTER B. PLATT.

165 PARK AVENUE, BALTIMORE, October 9, 1883.

Table of Statistics of Several Training Schools for Nurses, in their relation to their Hospitals and to each other, prepared that the friends of the Connecticut Training School may at the close of its Tenth Year understand its position as compared with similar institutions elsewhere.

DECEMBER, 1883.	No of T. S. Nurses, not including Supt.	Average No. patients under T. S. care.	Average to each Nurse.	Cleaners attached to each ward.	Men Nurses each ward.	Do T. S. Nurses dress wounds in men's wards?	Are maternity cases received?	Do T. S. Nurses care for male Erysipelas patients in isolat- ing wards?	Does Hospital bear all expenses of School?	Yearly average of T. S. salaries paid by Hospital.	Does the Supt. of Hospital think the T. S. valuable to the Hospital?	Does he know of any as good and cheaper plan?	How long is Hospital course?	Does School send Nurses out to pri- vate families the 2d year?
MASSACHUSETTS GENERAL HOSPITAL,	53	170	3 $\frac{1}{3}$	1	For the Hospital 6	Under the direction of House Staff or Assistants to them.	No	"No such wards. Nothing like an epidemic for 7 years." About 2 weeks' nursing yearly.	Board, lodging and washing, and part salaries.	\$3,527.33	"No Hos- pital of any size is com- plete with- out one."	"Any other system inferior in every respect."	2 years.	No.
NEW YORK, 15th St.,	36	140	3 $\frac{3}{8}$	1	1	No.	No	No rule. Sometimes.	Entire.	About \$5,700.00	"In all its develop- ments and departments good only and always good."	No.	18 mos.	No.
HARTFORD,	16	94	5 $\frac{1}{8}$	2 for the Hospital.	2	Yes.	Yes	Sometimes, or Hospital hires extra help.	Entire.	About \$4,952.00	"Decid- edly."	"All things consid- ered, no."	1 year.	Yes.
MT. SINAI, New York,	19	75	4	In women's wards 1 men's 2	3 no women.	Nowomen nurses in any such wards.	No	No T. School nurse is em- ployed in any such ward.	Salaries partly.	Not ascer- tained.	"Great benefit but expensive."		1 year.	Yes.
BELLEVUE,	50	260	5 $\frac{1}{8}$	1 or more if needed.	1	In one of them.	No	Only for women.	Salaries and wash- ing partly.	\$6,722.00	"Certainly I do."	No.	1 year.	Yes.
BOSTON CITY HOSPITAL,	61	286	4 $\frac{2}{3}$	1 woman with an as- sistant in every ward. 21 men Nurses and cleaners in addition		Yes.	No	One ward. 26 beds contagious diseases. 12 nurses and 1 cleaner.	Entire expense.	\$8,820.00	"Yes."	"The cheapest and best."	2 years.	No.
NEW HAVEN,	22 ¹	112	5	Partial services of one woman in each women's ward One man who acts as Nurse and also cleans in each men's ward, with occasional help.		Yes.	Yes	Always for men and women. Isol- ating wards open for the care of Erysipelas a large part of the months of Feb., March, April, May, June, Oct., Nov., and Dec.	Board, lodging and washing.		I do.	Not that I know of.	1 year.	Yes.

¹ One additional pupil is detailed to kitchen service, simply a duty not performed by other Schools.

It will be noticed that the New Haven Training School has been conducted with *less help* from Hospital servants, and at *less expense* to the Hospital with which it is connected than any other institution mentioned.

Although this table is dated 1883, I am not aware of anything similar on the subject bearing upon the same points. I believe that there are hospitals away from the cities named in the tables, large enough to support training schools, and which would do so if they were

THE STUDY OF OBSTETRICS IN PRAGUE.

FROM the moment the English-speaking medical student puts foot on Continental soil, he hears the most varied and conflicting reports of the advantages of

Prague as a place to study and pursue practical obstetrics. He hears that he can live comfortably in the hospital for a "mere song," and that opportunities are afforded him to perform "all the operations." But he occasionally hears these statements contradicted in the very strongest terms. It may, then, be of some value to the American student intending to take the Continental trip to be told in plain terms what opportunities for the study of obstetrics really exist in Prague.

The Gebärrhaus is a fine, irregular pile of brick buildings, freely ornamented with a steeple over the "Baptismal Chamber," giving to the whole rather a monastic and religious appearance. The building is quite new,—four or five years,—the wards being lofty, clean, and well ventilated. Since the rupture between the German and Bohemian citizens, some three years ago, the institution has been divided into three equal parts. One under German control; one under Bohemian, and one for the training of nurses, which, also, is under Bohemian control. Each division is quite independent of the other, and admits cases in regular rotation. The number of births ranges from 2700 to 3000 yearly, so that each division has from 900 to 1000 cases annually. It is to the German division that foreign students generally go, hence to this I will confine my future remarks.

The vacation months, April, May, August, and September, are usually chosen, as at this time there are no junior students attending. Dr. Fleischman, Prof. Breisky's first assistant, a very zealous and able teacher, gives two courses, each of four weeks' duration, during each of the vacations. The course consists in digital and external examinations of pregnant women, usually in the last week of pregnancy, combined with external measurements by Baudelocque's pelvimeter, and the various obstetrical operations on the phantom. The fee for the four week's course is 25 fl.—\$10; in addition to this, one is obliged to pay 10 fl. for permission to live in the maternity and "practise." It is, particularly, in relation to the latter that the most diverse statements obtain.

From extended inquiries, and personal experience within the hospital, I am enabled to define "practice" as the mere privilege of examining women in labor, according to a definite system. Three men are allowed to examine the same case, provided it is a normal one, and only the first man on the list is allowed to make further examinations during the course of the labor. The nurses, who, by the way, are very efficient, deliver all normal cases, the assistant being sent for only in cases requiring operative interference. This he always does himself, and no member of the class is allowed to put on the forceps, contrary to the impression that generally seems to prevail. It is considered quite a stroke of good fortune if one gets an opportunity of supporting the perineum and passing the catheter once.

Strict antisepticism is carried out to, perhaps, what may appear a ludicrous extent. After one has handled the "alcoholic foetus" used in the operative course, he must take a tub-bath, and change his underclothing, before being allowed to "practise." Prior to making a digital examination the hands and forearms must be well scrubbed, then bathed for five minutes in a corrosive sublimate solution (1 to 2000), rinsed with pure water, and dried. The statistics, which are among the

best on record (mortality a trifle over $\frac{1}{4}$ per cent.) seem to justify these precautionary measures. But the nurses and assistants have suffered, far more than once, from slight attacks of salivation by this free use of the sublimate in ablution.

Nature is interfered with as little as possible; the forceps are very seldom applied—not more, I think, than once in fifty cases. Every tear, no matter how insignificant, is carefully sewed with catgut uninterrupted suture. This is done from an antiseptic point of view, so as not to leave any abraded surface which would favor absorption of the decomposing discharges. As may be expected, the number of abnormal cases varies at different periods. But during a four weeks' course a couple of turnings, as many forceps applications, a few cases of eclampsia, and a craniotomy may be safely expected.

The living accommodations in the hospital are wretched. A large, dirty ward, with beds arranged on either side to the number of twenty, is consigned for this purpose. Two long deal-tables, with several broken chairs, and a couple of wardrobes, comprise the whole furniture of the "barracks," as it has been truly named. A single sink serves for all ablution requirements. Organisms that are not microscopic, with very ferocious appetites, abound in as great numbers as "microorganisms" in the object-field of a German microscopist. Let ten or twelve men from all parts of the universe, with the diverse toilet and other habits that pertain to such a motley collection, occupy the "barracks," and fancy the floors covered with a couple inches of dirt, let dirt meet the eye in whichever direction it turns, and a fair idea will be gained of the "comfortable residence" provided for in the hospital. It is not practicable to live in rooms outside. There is an isolated double room to be had in the hospital, but strangers are usually too late to obtain this luxury. To a green graduate, who, perhaps, has never made a digital examination, a four weeks' course in Prague, despite the personal inconveniences, will doubtless be of considerable benefit; but any one coming to the Continent for the purpose of familiarizing himself with the various obstetrical operations had better seek another field. H. N. V.

PRAGUE, September 21, 1885.

NEWS ITEMS.

WASHINGTON.

(From our Special Correspondent.)

CHOLERA AND TYPHOID FEVER IN MARSEILLES.—Consul F. H. Mason has forwarded to the Department of State the following report describing the progress of the epidemic of cholera in Marseilles: Since the date of his last communication on that subject the outbreak of typhoid fever at Marseilles and its causes, and the measures which have been proposed by the French Government to improve the sanitary condition of Marseilles and Toulon, since the 26th of August, the last day included in the latest report of this series, the daily cholera death-rate, as well as the total mortality from all causes, at Marseilles, has steadily subsided. The deaths from cholera have been numbered by days, 31, 28, 27, 24, 28, 25, 20, 12, 11, 11, 10, 16, 8. Total 251, or a daily average of 19 $\frac{1}{4}$. The total deaths from all causes during the same period have been 85, 65, 67, 58,

55, 45, 54, 52, 41, 38, 56, 54. Total 683, a daily average of over 56, or about the normal death-rate of the city. The total number of deaths during August was 2311, which is only 167 less than the record of July, the most fatal month of 1884. Meanwhile, the cholera has continued to spread throughout the villages and communities of this district, Nîmes, Cette, Aubagne, St. Marcel, and Salon, being among the more important of the towns attacked.

In various instances the transmission of the disease from one place to another has been the result of gross carelessness. The first fatal case at Arles was that of a workman of that city, who, having attended the funeral of a relative who had died of cholera at Salon, brought back the soiled clothing of the deceased. Nîmes ascribes its first case to a resident who attended the funeral of his father, who had died of cholera at Toulon. These examples are mentioned merely as evidence of the danger which is incurred by a person coming from a pure atmosphere into an infected one, and the importance at such times of isolating, as far as possible, houses and communities in which the malady prevails.

At Marseilles, the cholera has gradually assumed a more benign type, so that, at present, more than a majority of the cases are saved. This improvement is also attributed, in some degree, to a change in the treatment of the disease by most local physicians, who, dismayed by the fatality of the scourge during the early days of the epidemic, have since more or less abandoned the copious use of opium and other powerful drugs, which in many cases left the patient, after the initial vigor of the cholera had been overcome, weakened, and doomed to the fatal typhoid stage which follows excessive medication.

Camphor is one of the most essential elements in the new treatment.

Another interesting fact in the pathology of this epidemic was observed on the 20th and 21st of August, the two most fatal days of this year's visitation. The weather, which for six weeks previously had been intensely warm and sultry, became on the evening of the 19th cool and fresh. A strong, dry, refreshing breeze blew from the west-northwest during the next two days, and during those days the deaths from cholera numbered sixty-two and sixty-nine respectively. So far as is known every case of cholera which occurred during that period was fatal. Every method of treatment seemed alike futile; and the victims included numerous persons living in good estate, and who had committed no imprudence. The well-known bad effect of chill would explain some of this fatality, but it will not explain the malignity of other cases in which the victims were warmly clad and protected from all exposure. We are therefore driven back to the theory that the wind which prevailed at the time diminished the proportion of ozone in the atmosphere, which, as was shown last year, affects directly the fatality of cholera. During the epidemic of 1884 some experiments were made at the Pharo Hospital, in which a certain ward was supplied with ozone artificially generated by an electrical machine. The result was favorable, but the experiment was not conclusive for the reason that the machine was small, and the quantity of ozone supplied was therefore insufficient. Similar changes of weather at Toulon have this year been followed by the

same increased mortality, so that the ozone problem may be regarded as offering a field for valuable study.

A Scourge of Fevers.—At Marseilles, the exaggerated total death rate has been largely due to a continuance of the typhus and typhoid fevers, which have prevailed in some streets and precincts with alarming malignity.

At Sainte Marthe, a village which forms one of the northern suburbs of this city, there have been within a few days twenty deaths from typhoid fever among a population of less than 1400 people. The outbreak there is explained by the statement, that when the military camp at Pas des Lanciers, a few miles north of this city, was broken up in August by the fatal epidemics of fevers which compelled that resource, the blankets of the invalid soldiers were brought to Sainte Marthe and cleansed in a public "lavoir," where the linen of the entire village is washed. It is stated in defence of this extraordinary proceeding, that the bedding had been disinfected before being washed at Sainte Marthe, but the results seem to prove that the disinfection was not effective. Here again is a lesson to enforce: the importance of the rigid precaution in the treatment of textile materials coming from a district tainted with any contagious or infectious diseases. The commercial strictures which are so often seen and heard against the United States Government, for what is termed the needless severity of its regulations concerning the importation of rags from Mediterranean ports, betray a curious ignorance of this subject. When it is considered that, throughout almost the whole of Spain, and more than a hundred towns and villages of Southern France and Italy, cholera now exists or has existed during the present summer, that this disease, as well as typhus and typhoid fevers, is easily communicated by clothing and bedding, and that not only are the strictest regulations insufficient to prevent ignorant and avaricious people from concealing and selling the clothes and bedding of deceased relations, but that it is practically impossible in most cases to establish the exact origin of rags in the market of a large port like Marseilles; the importance of thorough disinfection of all rags from these countries must be admitted.

At Toulon, the cholera has been, as already reported, much more severe, relatively, than at Marseilles, though the course and type of the disease, its complications with typhus and typhoid fevers, and its increased fatality under certain cool, dry winds, have been exceedingly similar.

Of the 65,000 inhabitants of Toulon probably a third have left the city, and a large proportion of its shops and stores are closed.

Since the 27th of August the deaths from cholera among the diminished population have been, by days, as follows: 42, 27, 25, 15, 23, 9, 26, 23, 22, 16, 10, 11, 7. Total 256 choleraic deaths out of a total mortality of 331.

An incident worthy of record at Toulon, was the case of a gardener named Gherci, who, being at the hospital Bon Neucontre, in the final algid stage of cholera, cold, blue, and nearly pulseless, was left by the attendants as dying. Bottles of hot water had been packed around the sufferer in the hope of restoring his vital warmth, but in vain. The poor fellow, left to his own resources, managed to uncork and drink the contents of two of these bottles. This inward application of heat restored the vital current and his life was saved.

The lesson of this summer has been a severe one, not only to Marseilles and Toulon, but to the whole of France, whose prosperity has been vitally injured by the recurring epidemic, which, as is now plainly seen, might and ought to have been prevented. The French government is now thoroughly aroused to this constant menace on its southern coast, and during the past week the Minister of the Interior, M. Allain Targé, has paid a visit to both the stricken cities, to see and report officially what needs to be done. The necessities of the case are sufficiently plain, and the official report of the Minister states with clear conciseness what is to be done.

At Marseilles: 1. To construct two large transverse sewers to receive and discharge the entire sewerage of the city in deep water outside the ports.

2. To demolish and rebuild that part of the city in rear of the Bourse, and to open wide streets through the old and densely built quarters.

At Toulon: 1. To build an entire sewer system, which shall discharge into the open sea.

2. To open wide streets through the eastern part of the city.

3. To rebuild the fortifications in the same quarter, and remove entirely the encircling wall which now excludes air and light; and

4. To provide a complete water supply.

These are serious and costly measures, far beyond the unaided power of either city to undertake. Toulon is a great naval and military station with little seaward commerce or local trade except what is incident to the Government service. Marseilles, with her vast commerce crippled by the quarantines of those two unfortunate years, and her resources exhausted by the costly works undertaken since 1850, her waterworks, sewers, and pavements, is similarly unable to meet alone the cost of what remains to be done.

The Suez Canal, which has done so much for international commerce, has at the same time put Marseilles into direct relations with the permanently infected parts of Southern Asia.

The French operations in Cochin-China, the constant stream of invalid soldiers returning in crowded ships from service in those pestilential climates, have done the same or worse for Toulon. Both cities are radically defective in sanitary construction, both are exposed to constant and extraordinary dangers from abroad.

It is now believed that the Government will help Marseilles and Toulon because it must. The loss to France through cholera in June, 1884, is counted by millions, and the thousands of lives that have been sacrificed emphasize the demand that these twin nurseries of pestilence, shall be cleansed and raised to a modern standard of sanitation.

PROFESSORSHIP OF SURGERY IN GEORGETOWN UNIVERSITY, D. C.—At the time that Surgeon-General Hamilton, of the United States Marine-Hospital Service, handed his resignation to the President, he also resigned the Professorship of Surgery in the Medical Department of the Georgetown University, D. C. It was accepted with reluctance, and ex-Surgeon-General Philip S. Wales was finally appointed to the vacancy. When it was ascertained that the President would not accept the resignation of the Surgeon-General, Dr. Wales immediately

tendered his resignation of the Professorship, and Dr. Hamilton was reelected to the Chair, and has begun his lectures.

MONTREAL.

(From our Special Correspondent.)

MEDICO-CHIRURGICAL SOCIETY.—The election of officers for 1885-86 took place at the annual meeting held on Friday, October 9, with the following result:

President.—Dr. T. G. Roddick (reelected).

Vice Presidents.—Dr. I. C. Cameron, Dr. George Wilkins.

Treasurer.—Dr. Perrigo.

Secretary.—Dr. Gurd (reelected).

At this meeting a resolution was passed endorsing previous resolutions passed from time to time by the Society regarding the great efficacy of vaccination as a protection against smallpox, and the necessity of re-vaccination in such times as the present, when smallpox is so prevalent.

MEDICAL SCHOOLS.—Notwithstanding the smallpox, the medical schools have nearly as many students as in previous years. The McGill Medical School has a large entry of new men, and the classes are being held in the new building. The formal opening will take place on Thursday, October 22, when it is expected that several distinguished medical and lay men from a distance will deliver addresses. Professors Pepper and Osler, of Philadelphia, have promised to be present, and also Sir A. T. Galt and Sir Charles Tupper, M.D., K.C.M.G.

THE SMALLPOX EPIDEMIC.—At last the Provincial Board of Health has given orders to enforce the Compulsory Vaccination Act. The result has not been as brilliant as expected, for the local Board of Health has as yet done nothing to carry out the orders of the Central Board. There has certainly been some house-to-house visitations in the Western and English portions of the town, but this section had already been thoroughly vaccinated and revaccinated. I hear of no attempt being made by the health authorities to enforce the Compulsory Vaccination Act in the quarter of the city which needs it most, viz., St. Louis, St. James, and St. Mary's wards, occupied principally by French. The riots which took place here lately were merely a public manifestation of the feeling of the unvaccinated, and not the result of an attempt to enforce the Act. The East End Health Office which was wrecked has not yet been reopened. The opposition to vaccination among the French people is due, not only to social and religious prejudices, but to a large extent, I am sorry to say, to the bigotry and ignorance of many of the medical men, who, though publicly approving of vaccination, secretly denounce the practice as useless always and dangerous, especially in times when smallpox is epidemic. The medical men who act thus belong to a certain medical school in this city, which has a man occupying one of its most important chairs who for years has preached against vaccination, and who, like most anti-vaccinationists, is a fanatic on the subject.

The new smallpox hospital is now ready, and in it will be room for some five hundred more patients. The old hospital was much overcrowded, and could not take

in half the people who applied for admission. Now every person affected with smallpox, who declines to go to hospital has his house quarantined. Persons are not allowed to enter or leave the house during the period it is infected. Manufacturers, companies, and firms employing a number of people, have enforced vaccination, not only on their employes, but their families. Any employe declining to have his family vaccinated is immediately dismissed; thus large numbers of people are vaccinated who could not be reached in any other way. In many large establishments the workmen (French) have left in a body; but, after a day or two of reflection, have returned and submitted themselves and their families to vaccination.

The number of deaths from smallpox last week was nearly 300. About 80 per cent. of these were children under 10, and 90 per cent., French Roman Catholics. Last month, in this city, 697 died from smallpox, and in the suburbs about 150; total, nearly 850.

MORE RESIGNATIONS FROM THE CONGRESS.—Dr. Henry F. Campbell, of Augusta, Georgia, has declined the Vice-Presidency of the Congress.

Dr. E. O. Shakespeare, of Philadelphia, has resigned the Presidency of the Section of Pathology.

Dr. Henry G. Beyer, U. S. N., and John J. Mason, of Newport, have declined to serve on the Council of the Section of Physiology. Dr. Jerome N. Kidder, of Washington, has declined to serve on the Council of the Section of Public and International Hygiene. Dr. J. M. Flint, U. S. N., on the Council of the Section of Practical and Experimental Therapeutics.

THE AMERICAN ACADEMY OF MEDICINE will hold its next annual session at New York, on October 28 and 29, 1885.

OBITUARY RECORD.—Died, of pulmonary consumption, at his home in Baltimore, on Wednesday, October 7th, RICHARD MCSHERRY, M.D., in the 68th year of his age.

Dr. McSherry was born in Martinsburg, Va., in 1817, graduated from the medical school of the University of Pennsylvania in 1841, entered the army and served under Taylor in the Seminole War. In 1843, he became an assistant surgeon in the U. S. Navy, and saw active service in the marine corps under Scott in the Mexican campaign. Resigning his commission, he came to Baltimore in 1851, and entered upon the practice of his profession. In 1862, he was called to the chair of *Materia Medica* and Therapeutics in the University of Maryland, and in 1865 was transferred to that of Practice of Medicine, a position which he filled until his death. He was one of the founders and the first President of the Baltimore Academy of Medicine, and President of the Medico-Chirurgical Faculty for the year 1883.

Dr. McSherry was a facile writer and contributed many articles to the medical press, and even at his advanced age devoted himself with assiduity to literary pursuits. Among his publications may be prominently mentioned his excellent manual of hygiene, entitled *Health, and How to Promote It*, and an interesting sketch of military and civil life in Mexico, called *El Fuchero, or a Mixed Dish from Mexico*.

A man of irreproachable character and scholarly attainments, a dignified and courteous gentleman of the old school, a wise and conservative teacher and practitioner, a devoted husband and father, and a faithful friend, Dr. McSherry will be long remembered not only by the profession of his State, but also by the many friends in other walks of life whom he endeared to him by his genial manners and his guileless heart.

OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT U. S. ARMY, FROM OCTOBER 6 TO OCTOBER 12, 1885.

ADAIR, GEO. W., *Captain and Assistant Surgeon*.—Leave of absence extended one month.—S. O. 232, A. G. O., October 9, 1885.

WINSEL, DANIEL, *Captain and Assistant Surgeon*.—To be relieved from duty at Camp at Rock Springs, Wyoming Territory, and return to his proper station, Fort Fred. Steele, Wyoming Territory.—S. O. 99, Department of the Platte, October 1, 1885.

BIART, VICTOR, *Captain and Assistant Surgeon*.—Sick leave of absence further extended six months, on surgeon's certificate of disability.—S. O. 227, A. G. O., October 3, 1885.

BUSHNELL, G. E., *First Lieutenant and Assistant Surgeon*.—Granted leave of absence for one month.—S. O. 215, Department of the East, October 6, 1885.

STEPHENSON, WM., *First Lieutenant and Assistant Surgeon*.—Relieved from duty at Fort Niobrara, Nebraska, and ordered for duty at Camp at Rock Springs, Wyoming Territory.—S. O. 99, Department of the Platte, October 1, 1885.

CHAPIN, A. R., *First Lieutenant and Assistant Surgeon*.—Leave of absence extended one month.—S. O. 230, A. G. O., October 7, 1885.

MORRIS, EDWARD R., *First Lieutenant and Assistant Surgeon*.—(Recently appointed) ordered for duty in Department of Missouri.—S. O. 233, A. G. O., October 10, 1885.

OFFICIAL LIST OF CHANGES IN THE MEDICAL CORPS OF THE U. S. NAVY DURING THE WEEK ENDING OCTOBER 10, 1885.

BRIGHT, GEORGE A., *Surgeon*.—To United States Steamer "Brooklyn."

FITTS, HENRY B., *Assistant Surgeon*.—To Naval Hospital, New York.

HALL, JOHN H., *Passed Assistant Surgeon*.—Detached from Naval Hospital, Mare Island, California, and ordered to the "Hartford."

SWAN, ROBERT, *Passed Assistant Surgeon*.—Detached from Naval Hospital, New York, and ordered to the "Brooklyn."

OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF MEDICAL OFFICERS OF THE UNITED STATES MARINE-HOSPITAL SERVICE, FOR THE WEEK ENDING OCTOBER 10, 1885.

BAILHACHE, P. H., *Surgeon*.—To proceed to Tuckerton, New Jersey, as Inspector, October 7, 1885.

AUSTIN, H. W., *Surgeon*.—To proceed to Albany, New York, on special duty, October 6, 1885.

GASSAWAY, J. M., *Surgeon*.—To examine surfmen at Ellsworth, Maine, and other ports of First District Life Saving Service, October 9, 1885.

THE MEDICAL NEWS will be pleased to receive early intelligence of local events of general medical interest, or of matters which it is desirable to bring to the notice of the profession.

Local papers containing reports or news items should be marked. Letters, whether written for publication or private information, must be authenticated by the names and addresses of their writers—of course not necessarily for publication.

All communications relating to the editorial department of the NEWS should be addressed to No. 2004 Walnut Street, Philadelphia.